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OUTLINES OF THE HISTORY

OF

GREEK PHILOSOPHY

BY

D^R EDWARD ZELLER

TRANSLATED WITH THE AUTHOR'S SANCTION

BY

SARAH FRANCES ALLEYNE AND EVELYN ABBOTT

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1886

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IN MEMORIAM

SARAH FRANCES ALLEYNE

AUTHOR'S PREFACE.

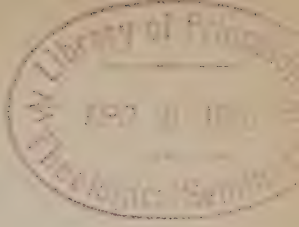
For some years it has been my intention to respond to a request arising from various quarters, and add to my larger work on the Philosophy of the Greeks a short sketch of the same subject. But until the third edition of the History was brought to a conclusion I had not the leisure for the work. Sketches of this kind will proceed on different lines according to the aim which is held in view. My object has been primarily to provide students with a help for academical lectures, which would facilitate preparation, and save the time wasted in writing down facts, without interfering with the lecturer's work or imposing any fetters upon it. Hence I have made it my task to give my readers a picture of the contents of the philosophical systems, and the course of their historical development, which should contain all the essential traits—and also to put into their hands the more important literary references and sources. But as in the last points I have not gone beyond what is absolutely necessary, so in the historical account I have as a rule indicated the parts very briefly with which historical considerations of a general kind or special explanations and inquiries are connected, or in

which it seemed proper to supplement my earlier work. (An addition of the latter kind, in some detail, will be found in sections 3 and 4.)

My outlines are intended in the first place for beginners, who as a rule form the majority of an audience. But these are rather confused than assisted if the historical material is given in too great abundance, or they are overwhelmed with the titles of books of which they will only see a very small portion. Anyone who wishes to study the history of philosophy or any part of it more minutely, must not content himself with a compendium, but consult the sources and the more comprehensive works upon them. At the same time, I am well aware that manuals may very properly be constructed on a different plan from mine. A trustworthy bibliography, for instance, furnished with the necessary hints on the value and contents of the various works, or a chrestomathy on the plan of Preller, but more strict in selection, would be very valuable aids in instruction. Nor will it be against my intention if the present work finds readers beyond its immediate object. Nevertheless, it is my opinion that every scientific exposition must set out with an accurately defined aim. It is highly objectionable that an author should constantly strive after other ends than that which is the main purpose of his book.

THE AUTHOR.

BERLIN: *September* 27, 1883.



TRANSLATOR'S PREFACE.

Of the following pages, the first part, down to the words 'practical life' on p. 90, is the work of the late Miss Alleyne, whose manuscripts were entrusted to me. For the remainder, and for the revision of the whole, I am responsible.

Miss Alleyne began her series of translations of Zeller's 'History of Philosophy' with the 'Plato and the Older Academy,' published in 1876 in conjunction with Prof. Goodwin, of University College, London. This was followed in 1881 by the two volumes of 'The Pre-Socratic Philosophy,' and in 1883 by 'The Eclectics.' It was also her intention, when the present work was ended, to translate the last volume of the 'History.' But in the prime of life, and in the full vigour of her powers, she died, after a month's illness, August 16, 1884.

The excellence of her work has received universal recognition. It was a labour of love. The theories of the Greek Philosophers, and their efforts to conceive the world in which they lived, had a deep interest for

her. An inward sympathy with them gave her an insight into the meaning of speculations which by many are deemed idle vagaries. To her they were steps or stages in the progress of the human mind, not merely words or opinions. In the 'being' of Parmenides, in the 'dry light' of Heracleitus, she perceived a beginning or foreshadowing of modern thought. Plato was 'one of the books she would have taken with her to a desert island.'

She knew the value of accuracy, and was at great pains to secure it. She had also a keen sense of literary style, and would turn a sentence three or four times before she could be satisfied with it. Hence the excellence of her work as a translator. But though her literary powers were of an uncommon order, to those who were personally acquainted with her they form only a small part of her claim to remembrance. For she united with rare intellectual gifts a truly noble and womanly character. She was one of those who live for others, themselves not caring to be known. There are many by whom her writings would not have been understood who cherish her memory as a great possession, and feel that they have lost a friend never to be replaced.

EVELYN ABBOTT.

BALLIOL COLLEGE, OXFORD:
November 10, 1885.

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Errata.

Page 17, line 5 from foot, *for* Hildebrand *read* Hildenbrand.
„ „ „ 6 from foot, *for* Zeigler *read* Ziegler.
„ 62, „ 13 from top, *for* mystic *read* mythic.
„ 83, „ 8 from top, *for* advantages *read* incidents.
„ 136, „ 1 from top, *for* § 50 *read* § 51.

OUTLINES

OF THE

HISTORY OF GREEK PHILOSOPHY.

INTRODUCTION.

A. *METHODOLOGIC AND LITERARY.*

§ 1. *The History of Philosophy.*

THE problem of philosophy is to investigate scientifically the ultimate bases of Knowledge and Being, and to comprehend all Reality in its interconnection with them. The attempts at the solution of this problem form the subject-matter with which the history of philosophy is concerned. But they are so only to the extent that they connect themselves with greater wholes, with interdependent series of development. The history of philosophy must point out by what causes the human spirit was led to philosophic inquiry; in what form men first became conscious of its problems, and how they undertook to solve them; how, in progress of time, thought subdued wider domains and found new statements of questions necessary, and new answers to them; and how out of the multifarious repetition of this process arose all the

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philosophic theories and systems with which we are at various periods more or less perfectly acquainted. In a word, it must describe the development of philosophic thought, in its historical connection from its earliest beginning, as completely as the condition of our sources of knowledge allow.

As we are here concerned with the knowledge of historical facts, and as facts which we have not ourselves observed can only be known to us through tradition, the history of philosophy, like all history, must begin with the collection of direct and indirect testimonies, the examination of their origin and credibility, and the establishment of facts in accordance with such evidence. But if this problem cannot be solved without regard to the historical connection in which the particular fact first receives its closer determination and full verification, it is at the same time impossible to understand the progress of historical events unless we put together the particular facts not only in relation to their contemporaneous or successive occurrence, but also in relation to cause and effect; unless each phenomenon is explained in reference to its causes and conditions, and its influence on contemporary and succeeding phenomena is pointed out. Now the theories and systems with which the history of philosophy is concerned are chiefly the work of individuals, and as such must be explained partly through the experiences which have given occasion to their formation, partly through the mode of thought and the character of their authors, the convictions, interests, and efforts, under the influence of which they originated. But

even if our authorities enabled us to carry out this biographical and psychological explanation far more completely than is the case, it would still be insufficient; for it would only inform us as to the immediate reasons of the historical phenomena, leaving unnoticed their more remote causes and the more comprehensive connection to which they belong. The views of individuals always depend, though not in all instances to the same degree, upon the circle of presentations from which their spirit has derived its nourishment, and under the influence of which it has been developed; and similarly their historical action is conditioned by the fact that they correspond to the necessities of the time, and find contemporary acknowledgment.

On the other hand, however, these views do not remain confined to their first authors, they spread and maintain themselves in schools, and by means of writings; a scientific tradition is formed, the later members learn from the earlier, and through them are stimulated to the completion, continuation, and correction of their results, to the asking of new questions, and the search after new answers and methods. The systems of philosophy, however peculiar and self-dependent they may be, thus appear as the members of a larger historical interconnection; in respect to this alone can they be perfectly understood; the farther we follow it, the more the individual becomes united to a whole of historical development, and the problem arises not merely of explaining this whole by means of the particular moments conditioning it, but likewise of explaining these moments by one another,

and consequently the individual by the whole. This does not mean that the historical facts are to be constructed in an *à priori* manner out of the conception of the sphere of life whose history is being considered, or out of the idea of the purpose to be attained through this history. By a purely historical method, on the basis of historical tradition, we must ascertain the conditions under which the actual course of events took place, the causes from which it proceeded, and the concatenation of the Individual which was the result. These causes and conditions, so far as the history of philosophy is concerned, may be reduced to three classes: (1) the general conditions of culture in the particular nation at that time; (2) the influence of the earlier systems upon the later; (3) the individual character of the several philosophers. If for the explanation of philosophic theories, we confine ourselves to the last, we shall fall into that biographical and psychological pragmatism of which we have already spoken. If we start, for this purpose, from the consideration that philosophy is not an isolated domain, but only a particular member in the collective life of nations and of humanity, that in its origin, progress, and character, it is conditioned by religious and political circumstances, the general state of mental culture, and the development of the other sciences, we shall then make an attempt to understand it in relation to these universal conditions of the history of culture. If we lay the greatest stress on the continuity of scientific tradition, on the internal connection and historical interaction of the philosophic schools and

systems, the history of philosophy appears as an isolated, self-included progression, proceeding from a definite starting-point, according to its own internal laws; a progression which we shall the more thoroughly understand the more completely we succeed in showing each later phenomenon to be the logical consequence of its predecessor, and consequently the whole, as Hegel undertook to prove, a development fulfilling itself with dialectic necessity. But though this moment increases in importance the more independently philosophy develops itself, the direction and form of philosophic thought is, at the same time, likewise determined by the other considerations. These, however, do not always stand in the same relation to each other in regard to their influence and significance; sometimes the creative energy of prominent personalities is more strongly felt, sometimes the dependence of the later systems upon the earlier, sometimes the operation of the universal conditions of culture. The historian has to inquire how much importance in the bringing about of historical results belongs to each of these elements, in any given case, and to draw a plan of the historical course and interconnection of the phenomena of which it consists, on the basis of this inquiry.

§ 2. *Greek Philosophy.*

The question as to the causes by which the world and human life are determined has occupied the spirit of man from the earliest times and in the most various places. But that which called it forth was originally not so much the desire for knowledge as the feeling of

dependence upon higher powers, and the wish to secure their favour; while the path on which an answer was sought was not that of scientific inquiry but of mythological poetry. Among a few nations only this produced in course of time theological and cosmological speculations which try to gain a more comprehensive view of the origin and constitution of the world, but as long as these speculations continue to start from mythological tradition, and are satisfied with the amplification and remodelling of mythical intuitions, they can only be reckoned as precursors of philosophy, not as philosophic theories proper. Philosophy first begins when man experiences and acts upon the necessity of explaining phenomena by means of *natural* causes. This necessity may have appeared independently in different places when the preliminary conditions of it were present; and we actually find among the Indian and Chinese systems of doctrine some which are far enough removed from the theological speculations of these nations to be truly described as their philosophy. But the thought of a rational knowledge of things asserted itself more strongly and with more abiding results among the Hellenes than in either of these countries; and it is from them alone that a continuous scientific tradition extends to our own times. The founders of Greek philosophy are at the same time the ancestors of our own; their knowledge therefore has for us not merely an historical, but also a very important practical and scientific interest; the former, however, exceeds all that the remaining science of the ancient world can offer, as much as Greek philosophy

itself, by its spiritual content, its scientific completeness, its rich and logical development, transcends all the rest of ancient science.

§ 3. *Original Sources. The History of Philosophy among the Ancients.*

Among the sources from which our knowledge of ancient philosophy is derived, the existing writings of the philosophers and fragments of their lost works, so far as they are genuine, as *immediate* sources, occupy the first place. Unauthentic writings, in proportion as their origin and date of composition can be determined, may be used as evidence for the standpoint and views of the circles from which they emanated. The *indirect* sources comprise besides independent historical accounts of the personality, lives, and doctrines of the philosophers, all the works in which these are occasionally mentioned. Among the latter the most valuable information is obtained partly from books of extracts, which have preserved for us fragments of older writers, such as those of Athenæus and Gellius, Eusebius' προπαρασκευὴ εὐαγγελική (about 330 A.D.), Johannes Stobæus' great work (probably composed between 450 A.D. and 550 A.D.), which is now, so far as any portions have been preserved, divided between the 'Eclogues' and the 'Florilegium;' and Photius' 'Library' (he died in 891 A.D.); and partly from the writings of authors who for the establishment of their own theories enter minutely into those of their predecessors, as Plato, so far as we know, was the first to do in a comprehensive manner, and after him Aristotle, still more thoroughly; later on,

authors like Cicero, Seneca, Plutarch, Galen, Sextus Empiricus, Numenius, Porphyry, Iamblichus, Proclus, the commentators on Aristotle and Plato, Philo of Alexandria, and the Christian Fathers, Justin, Clemens, Origen, Hippolytus, Tertullian, Augustin, Theodoret, &c. From Aristotle, through the critical survey of the principles of his predecessors contained in the first book of his 'Metaphysics,' came the first impulse towards the independent treatment of the history of philosophy, which Theophrastus undertook in the eighteen books of his 'Doctrines of the Physicists' (quoted as *φυσικαὶ δόξαι*, and also as *φυσικὴ ἱστορία*, 'History of Physics'), and in numerous monographs; while Eudemus treated of the history of Arithmetic, Geometry, and Astronomy, perhaps also of theological views, in separate works. On Theophrastus' 'History of Physics' were founded, as Diels has shown ('Doxographi,' 1879), those reviews of the doctrines of the various philosophers which Clitomachus (about 120 A.D.) gave in connection with the criticisms of Carneades, and which seem to have formed the chief treasury of the later sceptics, the compilation of the 'Placita,' which was made about 80–60 B.C. by an unknown author, and was already used by Cicero and Varro (an epitome of it has been to a great extent preserved in the Pseudo-Plutarchic 'Placita Philosophorum'), the 'Eclogues' of Stobæus (*vide supra*), and Theodoret's Ἑλληνικῶν *παθημάτων θεραπευτική*, iv. 5 ff. Theodoret calls the author of this work Aëtius; the date of its compilation would seem to fall in the first third, and that of the Plutarchic 'Placita' in the middle, of the second cen-

tury after Christ. The author of the Pseudo-Plutarchic *στρωματεῖς* (about 150 A.D.; fragments of them are preserved in Euseb. 'Pr. Ev.' i. 8), would seem to have drawn directly from Theophrastus, as also did two doxographs used by Hippolytus (*αἱρέσεων ἔλεγχος*, B. i. formerly designated as 'Philosophumena of Origen') and Diogenes Laertius. Further traces of this literature can be discovered in the Fathers of the Church, in Irenæus (about 190 A.D.), Clement (200 A.D.), Eusebius (died about 340 A.D.), Epiphanius (died in 403 A.D.), Augustin (died in 430 A.D.). The last offshoots of it that have been preserved are the treatise *περὶ φιλοσόφου ἱστορίας* by the pseudo-Galen, and Hermias' *διασυρμὸς τῶν ἐξω φιλοσόφων*. About 70 B.C. Antiochus of Ascalon, the Academic, tried to justify his Eclecticism by a syncretistic exposition of the Academic, Peripatetic, and Stoic doctrines, which was therefore based on motives not altogether historic. Towards the end of the same century, Eudorus the Academic and Arius Didymus the Eclectic Stoic followed him in a similar direction. (For fragments of Arius Didymus, see Diels, 'Doxogr.' 445 ff.; Stob. 'Ecl.' ii. 32 ff.)

Besides these dogmatic and historical surveys of the opinions of the philosophers, there is a second series of writings, which treat of them in a biographical manner partly as individuals, and partly according to schools, and unite the exposition of their doctrines with accounts of their lives, the common doctrines of a school with those of its founder. To these belong Xenophon's 'Memorabilia' of Socrates, and whatever is to be considered historical in the dialogues of Plato;

the lost writings of the Platonists, Speusippus, Xenocrates, Philippus, and Hermodorus, concerning their teacher; of Heracleides of Pontus, concerning the Pythagoreans; of Lyco the Pythagorean (about 320 B.C.), concerning Pythagoras. This branch of the literature of the history of philosophy has its chief seat, however, in the Peripatetic school, and among the scholars of Alexandria who were connected with it. Monographs on particular philosophers, and extracts from their books, are mentioned by Aristotle and Theophrastus, also by the Aristotelians, Dicæarchus, Aristoxenus (*βίοι ἀνδρῶν*, *Πυθαγορικαὶ ἀποφάσεις*), Clearchus, and Phanias. About 250 B.C. the celebrated Callimachus of Cyrene composed in Alexandria his great literary and historical work, which was of much importance for the history of philosophy, entitled *πίνακες τῶν ἐν πάσῃ παιδείᾳ διαλαμψάντων καὶ ὧν συνέγραψαν*. About 240 B.C. Neanthes of Cyzicus, composed a work *περὶ ἐνδόξων ἀνδρῶν*; about 225 B.C. Antigonus of Carystus wrote his *βίοι*; about 200 B.C. Hermippus the Peripatetic *ὁ Καλλιμάχειος*, another *βίοι*, a rich mine of biographical and literary notices for the later writers. Satyrus, the Aristarchean, another Peripatetic, also wrote *βίοι*, and Sotion a *διαδοχὴ τῶν φιλοσόφων*, which continued to be the authority for the division of particular philosophers among the schools; extracts from the two works last mentioned were made by Heracleides Lembus (180–150 B.C.). About the same time Antisthenes the Peripatetic, of Rhodes, wrote his *φιλοσόφων διαδοχαί*; the similar work of his countryman Sosicrates seems to have appeared rather later (130 B.C.). To the Academic school belonged

Aristippus (about 210 B.C.), who wrote a treatise *περὶ φυσιολόγων*, and the work of Clitomachus *περὶ αἱρέσεων*, perhaps not distinct from that mentioned on p. 8. From the school of the Stoics came Eratosthenes (274–194), the celebrated scholar whose chronological dates were adopted for the history of philosophy; Apollodorus (about 140 B.C.), also a Stoic, who seems to have followed him almost entirely in his 'Chronica;' also the treatises of Cleanthes and Sphærus on individual philosophers, and a work of Panætius on the schools of philosophy, but how far the three last-mentioned bore an historical character is doubtful. Nor does Epicurus appear to have given any historical accounts of the earlier philosophers. From his school came a few works which attempted to do this; an untrustworthy treatise on the Socratics by Idomeneus (about 270 B.C.); a *συναγωγὴ τῶν δογμάτων*, and a life of Epicurus by Apollodorus (about 120 B.C.); a *σύνταξις τῶν φιλοσόφων* by Philodemus (about 50 B.C.), this last, probably a mere compilation, from which the two Herculanean catalogues of the Academic and Stoic philosophers seem to have been taken. Among the contemporaries of Philodemus are the two Magnesians, Demetrius and Diocles, the former of whom wrote on authors of the same name, and the latter on the lives of the philosophers; and Apollonius of Tyre, the Stoic whose life of Zeno is quoted. Somewhat earlier in date is Alexander Polyhistor, who wrote a history of the philosophic schools (*φιλοσόφων διαδοχαί*), and an interpretation of the Pythagorean symbols. Hippobotus' catalogue of the philosophers, and his treatise

περὶ αἱρέσεων appear to belong also to about the same period. From the first century of our era, the history and doctrines of Pythagoras were continually expounded in the Neo-Pythagorean school; for example, by Moderatus and Apollonius of Tyana, 60–80 A.D., and by Nicomachus, about 130 A.D. But these expositions are altogether uncritical and without historical value. The writings of Favorinus (80 to 150 A.D.) contain many notices of the history of the philosophers, and Eusebius has preserved fragments of a critical survey of the philosophic systems by Aristocles the Peripatetic (about 180 A.D.). Indeed, it is only in fragments, and through isolated quotations, that the great majority of the works hitherto spoken of are known to us, and of these fragments and quotations we owe a considerable portion to a single work, the ten books of Diogenes Laertius on the lives and doctrines of celebrated philosophers. For however carelessly and uncritically this compilation, probably dating from the second quarter of the third century A.D., may have been made, the information it contains is of priceless worth, since most of the more ancient sources have been entirely lost. This information is as a rule given at second or third hand, but very often with the names of the authorities to whom Diogenes, or the authors transcribed by him, may be indebted for it. Among the Neo-Platonists, the learned Porphyry (about 232–304 A.D.) has done good service for the knowledge of the older philosophers, down to Plato, by his commentaries, and also by his φιλόσοφος ἱστορία, from which the life of Pythagoras has been preserved. The copious biography of Pytha-

goras by his pupil Iamblichus served as an introduction to a dogmatic work by the same author. For the history of the Neo-Platonic school, the chief authority is (about 400 A.D.) Eunapius' *βίοι φιλοσόφων καὶ σοφιστῶν* (Rhetoricians); the later period of the school was treated of in Damascius' *φιλόσοφος ἱστορία* (about 520 A.D.), of which only some fragments remain. Subsequently to 550 A.D., Hesychius of Miletus composed his work *περὶ τῶν ἐν παιδείᾳ διαλαμψάντων*, from which the articles on the ancient philosophers in Suidas' Lexicon (between 1000 A.D. and 1150 A.D.) are chiefly taken. The treatise, however, which we possess under the name of Hesychius is a late Byzantine compilation from Diogenes and Suidas, as is also the so-called 'Violarium' of the Empress Eudocia (1060 to 1070 A.D.), probably a forgery of the sixteenth century.

Among the sources of our knowledge of the ancient philosophers, the works devoted to the explanation of their writings occupy an important place. At how early a period the necessity of such explanations was felt is shown by the fact that about 280 B.C., Crantor, the Academic philosopher, commented on Plato's 'Timæus,' the Stoic Cleanthes (about 260 B.C.) on the treatise of Heracleitus, and that Aristophanes of Byzantium (about 200 B.C.) arranged the works of Plato in trilogies. But the most flourishing period of the commentators' activity first commences about the middle of the first century B.C. At this time Andronicus the Rhodian, the editor of 'Aristotle,' and Theophrastus established in the Peripatetic school the learned study of Aristotle's writings. From him

down to Alexander of Aphrodisias, the renowned expositor, stretches a long series of men who discussed these writings either in commentaries or in introductory and comprehensive works. This example was followed by the Platonic school. Soon after Andronicus, first Eudorus, and then Dercyllides and Thrasyllus made themselves known by their treatises on Plato, and after the time of Plutarch this philosopher was as zealously expounded in the Platonic school as Aristotle in the Peripatetic. The Neo-Platonists (and individual scholars even earlier) devoted themselves with equal energy to both, until the sixth century. Of the commentaries that have come down to us, those of Alexander on Aristotle's 'Metaphysics,' and of Simplicius (about 530 A.D.) on the 'Physics,' and the books 'De Cælo,' are of conspicuous value for the history of philosophy; next to these come the remaining commentaries of the same writers, and those of Johannes Philoponus (about 530 A.D.) on the works of Aristotle, and of Proclus (410 A.D. to 485 A.D.) on Plato.

§ 4. *Modern Aids.*

Of modern writings on Greek philosophy, only those will be quoted here which have appeared during the last two centuries; and of that number, only such as are of special importance in the history of our science, or of practical use in regard to its study at the present time. As a foundation, we must first mention Brucker's 'Historia critica Philosophiæ' (1742 ff.; Ancient Philosophy is treated of in vols. i. and ii.), a learned and critical work of conspicuous worth, though its

standpoint of historical criticism is not beyond that of its time; and, side by side with this, the appropriate portions of J. A. Fabricius' 'Bibliotheca Græca' (1705 ff., considerably enlarged in the edition of Harless, 1790 ff.). At the end of the eighteenth and beginning of the nineteenth century, the history of philosophy was treated of in its whole extent in three comprehensive works: Tiedemann's 'Geist der speculativen Philosophie' (1791–1797); Buhle's 'Lehrbuch der Geschichte der Philosophie' (1796–1804); and Tennemann's 'Geschichte der Philosophie' (1798–1819). Each of these works has its value; that of Tennemann retained its well-merited reputation the longest, in spite of the one-sidedness with which Kant dominates its historical judgment. Next, in regard to Ancient Philosophy, come the works of Meiners ('Geschichte der Wissenschaften in Griechenland und Rom,' 1781 ff., &c.) and Fülleborn ('Beiträge,' 1791 ff.). Soon, however, the influence of the post-Kantian philosophy asserted itself, and ancient science began to be treated in a new spirit. Schleiermacher's treatises on various Greek philosophers ('Sämmtliche Werke, Zur Phil.,' vols. ii. and iii.), but especially the introduction and notes to his translation of Plato ('Platon's Werke,' 1804–1828), which was followed after his death by his concise and suggestive 'History of Philosophy,' with its original points of view (1839, 'W. W. Z. Phil.,' vol. ii. sec. 1); and Böckh's writings (the most important are those printed in vol. iii. of the 'Kleine Schriften,' on 'Plato,' 'Life of Philolaus,' &c., 1819; 'Untersuchungen über das kosmische System des Plato,' 1852)

gave the type for a treatment of history, entering more deeply into the special character of the ancient philosophers and the inner laboratories of their thoughts. Hegel's 'Vorlesungen' on the History of Philosophy (published after his death, 1833, 1840, in vols. xiii.–xv. of his Works) emphasise the dialectical necessity of the evolution of the later philosophers from the earlier, not without some one-sidedness, but they have powerfully contributed to the scientific comprehension and historical criticism of the philosophic systems. The meritorious works of Ritter ('Gesch. der Phil.,' vols. i.–iv., 1829 f., 1836 f.) and Brandis ('Handbuch der Gesch. der Griechisch-Röm. Phil.,' 3 Th. in six volumes, 1835–1866) are allied with Schleiermacher as to their general tendency. To mediate between learned inquiry and the speculative view of history, and to gain a knowledge of the importance and interdependence of the individual from tradition itself through critical sifting and historical connection, is the task proposed to itself by my own 'Philosophie der Griechen' (first edition, 1844–1852; third edition, 1869–1882; fourth edition of the first part, 1876). From the standpoint of the school of Herbart, Strümpell, in a more concise manner, has written his 'Geschichte der theoretischen Philosophie der Griechen,' 1854, and 'Geschichte der praktischen Philosophie der Griechen von Aristoteles,' 1861. Among the scholars of other countries, by whom the history of philosophy in modern times has been advanced, are Victor Cousin (1792–1867), in his 'Fragments philosophiques,' his 'Introduction à l'histoire de la Philosophie,' and his

'Histoire Générale de la Philosophie;' George Grote (1794–1871), in portions of his 'History of Greece,' especially vol. viii., his 'Plato' (1865), and the unfinished 'Aristotle' (1872). Of the numerous compendiums which deal with this subject, the following may be mentioned: Brandis, 'Gesch. der Entwicklungen der Griech. Phil.,' 1862-1864; Ritter and Preller (subsequently Preller only), 'Historia Philosophiæ Græco-Romanæ ex fontium locis contexta,' 1838, sixth edition, 1879; Schwegler, 'Gesch. der Phil. im Umriss,' 1848, eleventh edition, 1882; 'Gesch. der Griech. Phil.,' edited by Köstlin, third edition, 1882; Ueberweg, 'Grundriss der Gesch. der Phil.,' 1 Theil, 1862, sixth edition, 1880; E. Erdmann, 'Grundriss der Gesch. der Phil.,' Theil i. 1866, eighth edition, 1878; Lewes, 'History of Philosophy,' vol. i. 1867; J. B. Meyer, 'Leitfaden zur Gesch. der Phil.,' 1882, pp. 8–32. Among the works which are concerned with the history of special philosophical subjects, the most important are the following: Prantl, 'Gesch. d. Logik im Abendland,' vol. i. 1885; 'Lange, 'Gesch. der Materialismus,' Theil i., second edition, 1873, fourth edition 1882; Heinze, 'Die Lehre vom Logos in der Griech. Phil.,' 1872; Siebeck, 'Gesch. der Psychologie,' Theil i. Abth. 1; 'Die Psychologie vor Aristoteles,' 1880; Zeigler, 'Gesch. der Ethik,' 1881; L. Schmidt, 'Die Ethik der alten Griechen,' 1882; Hildebrand, 'Gesch. und System der Rechts- und Staatsphilosophie,' vol. i. 1860. Diels ('Doxographi Græci,' 1879) has edited the Greek doxographers and investigated their authorities; the literature of the Florilegia is discussed by

Wachsmuth ('Studien zu der Griech. Florilegien,' 1882); the most complete collection of fragments of the ancient philosophers as yet made is that of Mullach ('Fragmenta Philosophorum Græc.,' three parts, 1860, 1867, 1881). The most important monographs on particular philosophers and their works will be mentioned in the proper places.

B. *HISTORICAL INTRODUCTION.*

§ 5. *Origin of Greek Philosophy. Its supposed derivation from the East.*

An old tradition affirms that several of the most important of the Greek philosophers—Pythagoras, Democritus, Plato, and others—owe their scientific doctrines to Eastern nations. Even in the time of Herodotus the Egyptians tried to represent themselves to the Greeks as the fathers of the Greek religion, and from the third century before Christ and onwards we meet with the opinion, perhaps first introduced by Orientals, but readily adopted and further developed by the Greeks, that the whole Greek philosophy, or at any rate many of its most influential doctrines and systems, came from the East. The Jews of the Alexandrian school, from the second century before Christ, set up a similar claim for the prophets and sacred writings of their nation; and the Christian scholars from Clement and Eusebius till after the close of the Middle Ages supported them in it. These Jewish fables indeed are now generally abandoned; but the theory of an Eastern origin of Greek philosophy as such continues

to find advocates. Its most strenuous defenders in modern times are Röth ('Gesch. der abendl. Phil.' vol. i. 1846, 1862; vol. ii. 1858) and Gladisch (the latter in a series of works since 1841; cf. Zeller's 'Pre-Socratic Philosophy,' vol. i. p. 35).

There is no doubt that the forefathers of the Hellenes brought from their Asiatic abodes into their new home, together with the groundwork of their language, certain religious and ethical presentations akin to those of the other Indo-Germanic peoples; in this new home itself they experienced for centuries the influence of their Eastern neighbours, especially the Phœnicians, and through the effects of such influence the later Hellenic nationality developed itself out of the Pelasgic. We may also give credit to the tradition which says that the Hellenes afterwards received the first elements of their mathematical and astronomical knowledge from the East. But that they borrowed philosophic doctrines and methods from thence (irrespective of certain late phenomena) cannot be proved. Often as this assertion is made by authors of the Alexandrian and post-Alexandrian period, not one of them can show that he has taken it from a trustworthy tradition, or from one that goes back to the facts themselves. On the contrary we are confronted with the remarkable phenomenon that the authorities become more and more silent the nearer we approach the period of the supposed events, and are more and more copious the farther we recede from them; and that in proportion as the Greeks become acquainted with more distant Oriental nations, so do the supposed instructors of their

ancient philosophers increase in number. This state of things decidedly indicates that the later statements are not derived from historical recollection, are not testimonies, but mere conjectures. If on the other hand we seek to infer the dependence of Greek philosophy on Oriental speculations from their internal similarity, this appearance vanishes as soon as we regard them both in their historical definiteness, and ascribe neither to the Greeks nor the Orientals what later interpretation has introduced into their doctrines. Their coincidence then is seen to be confined to points in regard to which we do not require the explanation that the Greek philosophers wholly or partially derived their doctrines from Oriental sources. This theory is not merely indemonstrable, but has weighty and positive reasons against it. The Eastern nations with whom the Greeks down to the time of Alexander came in contact, so far as our knowledge respecting them extends, had indeed mythologies and mythical cosmogonies, but none of them possessed a philosophy, none made an attempt at a natural explanation of things, which could have served the Greek thinkers as the source or pattern of their own; and if even something of philosophy had been found among them, the difficulties arising from language would have put great hindrances in the way of its transfer to the Hellenes. Greek philosophy, on the other hand, bears an altogether national stamp. Even in its most ancient representatives it displays none of the phenomena which elsewhere universally appear when a nation derives its science from without; no conflict of indi-

genous with alien elements, no use of uncomprehended formulæ, no trace of slavish appropriation and imitation of the traditional. And while among the Orientals science is entirely a monopoly of the priesthood, and therefore dependent on priestly institutions and traditions, not only was Greek philosophy from its very commencement wholly free and self-dependent, but the Greek people were more and more absolutely devoid of any special priestly class or hierarchy the farther we remount towards their earliest antiquity. If lastly, we take the older and more trustworthy evidence, Aristotle ('Metaph. i. 1, 981 b. 23) allows that the Egyptians were the discoverers of the mathematical sciences, but he never mentions Egyptian or Oriental philosophemes, though he carefully notices all traces of later doctrines in the earlier philosophers. In the time of Herodotus even the Egyptian priests do not as yet seem to have thought that philosophical knowledge might have come to the Greeks from them. Democritus (Clemens, 'Strom.' i. 304 A) allows no precedence to the Egyptian sages even in geometry, before himself, and Plato ('Rep.' iv. 435 E; 'Laws,' v. 747 C) ascribes to the Egyptians and Phœnicians τὸ φιλοχρήματον, and to the Hellenes τὸ φιλομαθές as their characteristic quality.

§ 6. *Native Sources of Greek Philosophy.*

The real origins of Greek philosophy are to be found in the happy endowments of the Greek nation, in the incitements afforded by its situation and history, and the course taken by its religious, moral, political, and

artistic development down to the period in which we discover the first attempts at philosophic inquiry. No other nation of antiquity was endowed from the very commencement with so many and various advantages of disposition as the Hellenic, in none do we find practical address and active power united with so delicate a feeling for the beautiful and such a deep and keen thirst for knowledge, the healthiest realism with so much ideality, the acutest perception of individuality with such a remarkable genius for the orderly and agreeable combination of individuals, the shaping of a beautiful and self-consistent whole. To this natural temperament must be added the favourable character of the position of their country, which afforded stimulus and resources of the most diverse kinds, but only bestowed its gifts on those who knew how to earn them by their own exertions. With their settlements on the bridge connecting Europe and Asia, in islands and on richly developed coasts of moderate fertility, the Greeks were marked out for the liveliest intercourse with each other and with their neighbours; by some of the latter, so long as these retained their superiority in power and culture, they were considerably influenced (*vide supra*, p. 19), but they also knew how to free themselves in time from this influence, to conquer or Hellenise the strangers, and to open for their own nationality a wide field of operation through extensive colonisation. Thus in the small commonwealths of the Hellenic cities, the foundations of a culture unique in itself, and in its historical effects, were early developed. Those views of Nature from which the worship of the gods in the

pre-Hellenic period arose were ethically deepened and artistically transformed; the gods were raised to moral powers, the ideals of human activities and conditions, and if religion as such (in the mysteries as little as in the public worship) did not transcend the limits of an anthropomorphic polytheism, it contained living and powerful germs, which needed only to be developed in order to do so. And because it was more concerned with worship than doctrine; because it possessed no uniform and universally acknowledged dogmatic system, but only a mythology handed down by tradition with manifold variations, and kept by the active imagination of the people and the poets in a constant state of flux; because, above all, it had no regularly organised priesthood endowed with external power—for all these reasons, despite the attacks to which an Anaxagoras, a Protagoras, a Socrates were subjected (Aristotle is scarcely to be included here), it opposed, generally speaking, no obstacles to the free movement and progress of thought among the Greeks at all comparable to those which had to be combated in the Middle Ages and in the Oriental kingdoms. The same freedom reigns in the moral life and civil institutions of the Hellenic people, and in Athens and the Ionian colonies, precisely those portions which did the most for its science, it asserted itself to an extent that was of great importance for scientific labours. No less important, however, in this respect was the second fundamental feature of Greek life, that respect for custom and law, that subordination of the individual to the whole, without which the republican constitutions of the Greek cities could not have

subsisted. From the freedom with which men moved in all the relations of life, scientific thought derived the independence and boldness which we admire even in the most ancient Greek philosophers; the taste for order and law which had developed itself in civil life demanded also that in the theoretic view of the world the individual should be comprehended in a whole and made dependent upon the laws of that whole. How essentially, moreover, the formal training of thought and speech must have been advanced by the animated movement and numerous claims of civil life, and how greatly scientific activity must have thereby benefited, may easily be seen. A similar service was rendered by poetry, which in its epic, lyric, and didactic forms was so richly developed in the four centuries preceding the first beginnings of Greek philosophy; it embraced the theological, cosmological, and ethical intuitions of the Greek tribes in pictures and sayings which were regarded as the expression of universally recognised truth by the contemporary and succeeding period; and thus indicated to the rising philosophy the presuppositions it had to consider, and either endorse or reject.

§ 7. *The Development of Greek Thought before the Sixth Century B.C.*

If then we survey the position to which Greek thought had attained in the directions indicated, previous to the sixth century before Christ, we shall find at first theological presentations of a general kind, as is natural, moving upon the soil of the traditional

Homeric and Hesiodic mythology. Nevertheless, among the poets of the seventh and sixth centuries, the traces are perceptible of a gradual purification of the idea of God, for Zeus as the uniform representative and protector of the moral order of the world begins to come forward more prominently from among the multiplicity of gods. On the one hand (Solon. 'Fr.' 13, 17, f.) the difference between divine and human justice is acknowledged, but on the other (Theognis, about 540, v. 373) doubts are expressed of the latter, which could only lead to a critical state of mind in regard to the traditional ideas. But the need of worthier conceptions of the Deity first asserted itself more definitely and powerfully in the poets of the fifth century, when philosophy had already commenced its attacks upon the popular polytheism. As to *cosmological* theories, their groundwork is the 'Theogony' of Hesiod, from which the meagre fragments of some other expositions (those of Epimenides and Acusilaus), and of the most ancient Orphic Theogony used by Plato, Aristotle, and Eudemus, are not far removed; while other Orphic Theogonies better known to us, with their theological syncretism and pantheism, unmistakably belong to the post-Aristotelian period. Nevertheless, the ideas and reflections which in these ancient cosmogonies combine to form a representation of the origin of the world are of a very simple description, and the question of the natural causes of things is not as yet entertained. Pherecydes of Syros (about 540 B.C.) approaches it somewhat more closely. He describes Zeus, Chronos, and Chthon as the first and everlasting, and the earth

as clothed by Zeus in its many-coloured garment; he also speaks of a conquest of Ophioneus by Chronos and the gods. Thus his exposition seems to be based upon the thought that the formation of the world is a consequence of the operation of the heavenly upon the terrestrial, and that in this process the unregulated forces of nature were only gradually overcome. But the mythical form of representation conceals thoughts under enigmatical symbols, and that which ought to be explained by its natural causes still appears throughout as the uncomprehended work of the gods. Among the Greeks, as everywhere else, the universally recognised moral laws are referred to the will of the gods, and their inviolability is founded on the belief in Divine retributive justice. This belief gained considerably in power from the time that the ideas concerning a future state entered its service, and the shadowy existence in Hades, beyond which the belief in immortality of the Homeric period never went, was filled with greater life and meaning, through the doctrine of a future retribution. But though this change had gradually been taking place since the eighth and seventh centuries, together with the increasing spread of the mysteries—and the Orphic-Dionysiac mysteries especially contributed to it through the dogma of the transmigration of souls—it would nevertheless seem that the predominant mode of thought was not deeply affected by the belief in a future life, until towards the end of the sixth century, and that it was itself primarily only a means for recommending dedications, through hope and fear; it was under the influence of Pythagoreanism that the belief

appears first to have been more universally spread, and turned to account in a purer moral tendency. With this religious treatment of ethical questions, however, it was inevitable in so lively and capable a people as the Greeks that the development of intelligent moral reflection should go on side by side. The traces of this may be followed from the Homeric portrayals of character and moral sayings, and Hesiod's practical rules of life, through the fragments of the later poets; they are most marked in the Gnomic poets of the sixth century, in Solon, Phocylides, and Theognis. The development of such a tendency in this period is also indicated by the fact that most of the men reckoned among the so-called *Seven Wise Men* exhibit it. The story of the *Wise Men* (which we first meet with, as then universally recognised, in Plato, 'Protagoras,' 343 A) is for the rest entirely unhistorical, not merely as to the statements concerning the tripod, their maxims, their meetings and letters, but also as to the theory that seven men were acknowledged by their contemporaries to be the wisest. Even their names are very variously given: we are acquainted with twenty-two belonging to widely different periods. Only four are to be found in all the enumerations, viz.: Thales, Bias, Pittacus, and Solon. Of the rest those most frequently mentioned are Cleobulus, Myson, Chilon, Periander, and Anacharsis. The connection of this practical wisdom with the beginnings of Greek science is shown by the significant fact that the same man stands at the head of the seven who opens the series of Greek physicists.

§ 8. *Character and Development of Greek Philosophy.*

As a product of the Hellenic spirit, Greek philosophy exhibits the same characteristic features; it accompanies the development of that spirit with its own, becomes an increasingly important factor in that development, and, after the loss of political independence, the leading power in the life of the Greek people. Having grown strong in practical life, at the awakening of scientific necessity, thought first turns to the consideration of the world, of which the Greek felt himself a part, and in which he was already accustomed through his religion to adore the most immediate original revelation of the divine powers. It does this with the simple self-confidence which is so natural to early inquiry before it is acquainted with the difficulties awaiting it or discouraged by disappointments, and especially natural to a people like the Greeks, who were so happy and so much at home in the world around them, and stood, in the main, on such familiar terms with their gods. Greek philosophy, therefore, in its first period was in respect to its *object* a philosophy of nature; for its essential interest lay in the inquiry into the origin and causes of the universe. The problem of the nature and mission of man was treated in an isolated manner, and rather in a popular than a scientific form. Further, this philosophy was, in respect to its *procedure*, a dogmatism: *i.e.* it seeks to obtain a theory of the objective world before it has given account to itself of the problem and conditions of scientific knowledge. Finally, in its *results* it is realistic, and even

materialistic; not until the end of this period was the difference between spiritual and corporeal brought to consciousness by Anaxagoras. Already, however, interest had begun to be diverted from this wholly physical inquiry, in connection with the change which, since the Persian War had taken place in the conditions and needs of the Greeks; the Sophists destroy by their Sceptic and Eristic doctrines belief in the cognisability of objects, and require in its stead a knowledge that is practically useful and subservient to the ends of the subject; but Socrates was the first to lay a new foundation, not only for this practical philosophy, but for philosophy in general.

By Socrates, Plato, and Aristotle, Greek philosophy was brought to its scientific climax. The consideration of the problem and conditions of knowledge leads to the development of logic; physics are supplemented on the one side by ethics, and on the other by metaphysics (Plato's 'Dialectic,' and Aristotle's 'First Philosophy'); the formation, classification, and combination of concepts constitutes the fixed nucleus of the scientific method; the immaterial essence of things which is the object of philosophic thought, the idea or the form of the idea opposes itself to its phenomenon as a higher reality, the spirit is distinguished as thinking essence from its body, and as man acknowledges it as his proper task to develop this higher part of himself, and to govern the lower by means of it, so the creative activity of nature is directed to bringing the form, as the end of its production, to its manifestation in matter. But though this was an advance not only beyond the

philosophy of the time, but also beyond the general standpoint of the Hellenic view of the world, though the harmony of the inner and the outer, the simple unity of spirit with nature which had formed the original presupposition for the classic beauty of Greek life was interrupted, this change had nevertheless been preparing in the development of the Greek nation, and in it the features which distinguish ancient philosophy from modern are undeniable. In the concept-philosophy of Socrates and his successors a forward movement was made in the scientific sphere, similar to that achieved by the plastic art and poetry of the fifth century in the region of art; out of the multiplicity of phenomena the common traits, the unchangeable forms of things were taken as the essential element in them; in these were seen the proper object of artistic exposition and of scientific knowledge; science and art coincide in their common direction towards the ideal. This idealism, even in Plato, does not bear the modern subjective character; the forms of things are not products of thought either divine or human; they stand in plastic objectivity, as prototypes of things, over against the spirit which contemplates them. Far as the ancient Greek standpoint was transcended by the ethics of Socrates, and still more of Plato, the latter nevertheless remained true to the æsthetic as well as the political character of Greek morality; and though Aristotle by his preference for scientific activity goes beyond this, his doctrine of virtue is wholly Greek; he, too, upholds the connection of ethics with politics, the lofty contempt of material work for the purposes of

gain, and that opposition of Hellenes and barbarians, the strongest expression of which is his defence of slavery. The stricter conception of personality is wanting in Plato and Aristotle, and its rights are very imperfectly recognised by them, especially by Plato. The study of nature is not only pursued with the liveliest interest by Aristotle, but even Plato is not hindered by his idealism from intense admiration of the beauty and divinity of the visible world; and he and his disciple are agreed in their conviction of the adaptation of means to end in nature, in that æsthetic view and worship of nature which clearly show the reaction of those intuitions whose most ancient product was the Greek natural religion.

An important change took place in philosophy, as in the whole sphere of Greek thought, after the end of the fourth century, under the influence of the conditions brought about by Alexander's conquests. The taste for natural investigation and purely theoretic inquiry unmistakably retrograded; side by side with the Academy and the Peripatetic schools, and before long decidedly preponderating over them, appeared the Stoics and Epicureans, who placed the centre of gravity of philosophy in Ethics; while in Physics they allied themselves to the pre-Socratic systems, appropriating and developing from these, however, for the most part only those elements which bore upon the moral and religious view of the world. Ethics themselves among the Stoics and Epicureans have the character partly of individualism, partly of an abstract cosmopolitanism; widely as those philosophers differ from each other in

many respects, both schools require elevation above the limits of nationality, independence of all things external, the self-satisfaction of the wise man in his inner life. On these points the contemporary sceptics are likewise in harmony with them, but they sought to attain the same practical end by another road, through entire abandonment of knowledge. From the intercourse of these schools with each other and with their predecessors after the second half of the second century B.C., a reaction set in against the scepticism of the New Academy: namely, that eclecticism which was strongest in the Academy, but likewise found entrance among the Stoics and Peripatetics, while in the school of Ænesidemus scepticism acquired a new centre, and among the Neo-Pythagoreans and the Platonists connected with them the eclectic and sceptical tendencies of the time unite to form a half-Oriental philosophy of revelation, developing itself partly on Greek soil and partly on that of Judaic Hellenism. During the first centuries after Christ this mode of thought increasingly spread; and in the middle of the third it was developed by Plotinus as Neo-Platonism into a comprehensive system, which overcame all others or adopted them into itself. With the dissolution of the Neo-Platonic School in the sixth century Greek philosophy disappears as a distinct phenomenon from the theatre of history, and only continues to exist in combination with foreign elements in the service of a new form of culture in the science of the Middle Ages and of modern times.

It is undeniable that this development led Greek

thought further and further from its original starting-points. But certain important features still remain to show that we are always on Greek soil. Abrupt as is the opposition in which reason and sense are placed by the ethics of the Stoics, life according to nature continues to be their watchword: in physics the Stoics went back from the Platonic-Aristotelian dualism to the hylozoism of Heracleitus; by their teleological view of the universe they approximate to the anthropomorphism of the popular religion, and in their theology they undertook the defence of the same notions with which science had in truth long since broken. Epicurus, by his mechanical physics, sets himself in the most marked opposition to the popular belief as well as to the teleological explanation of nature; but his æsthetic needs oblige him to adopt a new though inadequate doctrine of the gods; and if in his ethics he discards the political element of ancient Greek morality more completely than the Stoics, the harmony of the sensible and spiritual life, which is his practical ideal, approximates on that account more nearly to the original Hellenic view. The sceptical schools, also, are not far from that view in their practical principles, while on the other hand they accept the impossibility of knowledge as a natural destiny with a placidity which is no longer so easy in the Christian period. But even the phenomenon which announces most clearly the transition from the Greek world to the Christian, the Neo-Pythagorean and Neo-Platonic speculation, makes its connection with the ancient mode of thought plainly perceptible. Though it places

the visible world far below the invisible, the former is still regarded as filled with divine powers, as a manifestation, perfect in its kind, of the higher world. The beauty of the world is defended against the Christian's contempt for Nature and its eternity against the theory of a creation; and those orders of superhuman essences in whom the divine powers descend to the world, and with whose assistance man is to raise himself to the Deity, are the metaphysical counterpart of the popular polytheism, of which these philosophers were the last champions.

FIRST PERIOD.

THE PRE-SOCRATIC PHILOSOPHY.

§ 9. *Course of its Development.*

THE first attempt among the Greeks at a scientific explanation of the world was made by Thales the Milesian, who was followed by his countrymen Anaximander and Anaximenes, and later by Diogenes of Apollonia and other representatives of the ancient Ionian school. Through the Ionians, Pythagoras and Xenophanes, these endeavours were transplanted to Lower Italy and carried on with such independent inquiry that from each of them there arose a new school. These three most ancient schools, whose origin dates from the sixth century before Christ, agree only herein, that in regard to the causes of things which science has to point out, they think primarily of their substantial causes—*i.e.* that from which they arose, and in which, according to their essential nature, they consist; but they do not as yet definitely face the problem of explaining origin, decay, and change as such, and of discovering the universal cause of these phenomena. Thus the ancient Ionian philosophers inquire of what matter the world was formed and in what way the world arose from it. The Pythagoreans seek the essence of which things consist in number, and derive their existence and qualities

from the fixed and numerically determined regularity of phenomena. The Eleatic philosophy, starting from the unity of the world, through Parmenides recognises its essence in Being as such; and by unconditionally excluding all Non-being from the conception of Being, declares the multiplicity of things and motion to be unthinkable.

A new departure of natural philosophical inquiry begins with Heracleitus. In asserting that in the ceaseless change of matter and the combinations of matter there is nothing permanent except the law of this change, he proposed to his successors the problem of explaining this phenomenon itself, of stating the reason of change and motion. Empedocles, Leucippus, and Anaxagoras attempted this by reducing all Becoming and all change to the combination and separation of underived, imperishable, and in themselves unchangeable material substances, and thereby deriving Becoming itself from one original Being, which differed indeed from the Being of Parmenides in respect of its multiplicity and divisibility but had otherwise the same essential qualities. These primitive substances are conceived by Empedocles as qualitatively distinguished from each other, limited as to number, and divisible to infinity; by Leucippus as homogeneous in quality, unlimited in number, and indivisible; by Anaxagoras as different in quality, unlimited in number, and divisible to infinity. In order to explain motion, on which all combination and division of substances is based, Empedocles annexes moving forces to the elements in a mythical form; Leucippus and Democritus

remove the atoms into empty space; lastly, Anaxagoras takes refuge in the world-forming Spirit.

Here the standpoint hitherto occupied by physics is in point of fact transcended; it was abandoned in principle by the Sophistic doctrine. This denies all possibility of knowledge, restricts philosophy to the questions of practical life, and even deprives practical life of any universally valid rule. Thus it brings about the Socratic reform of philosophy; in part directly. and in part indirectly, inasmuch as it rendered that reform a necessity through the one-sided and doubtful character of its own results.

I. The Three Earliest Schools.

A. The Ancient Ionians.

§ 10. *Thales.*

Thales, a contemporary of Solon and Crœsus, was a citizen of Miletus, whose ancestry was derived from the Bœotian Cadmeans. His birth was placed by Apollodorus, according to Diog. i. 37, in Ol. 35, 1, *i.e.* 640 B.C. (it was probably, however, in Ol. 39, 1, or 624 B.C.), and his death in Ol. 58, *i.e.* 548–5 B.C. The former of these dates appears to be founded on that of the solar eclipse in 585 B.C. (*vide infra*). The position assigned him as the head of the Seven Wise Men (*vide sup.* p. 27) and what is said of him in Herod. i. 170 and Diog. i. 25, are evidence of the esteem in which his practical wisdom and statesmanlike ability were held. His mathematical and astronomical knowledge, acquired, according to Eudemus, in Phœnicia and

Egypt and transplanted to Greece, are likewise celebrated; among the proofs given of this, the most famous is that he predicted the solar eclipse which occurred, according to the Julian calendar, in 585 B.C., on May 28 (Herod. i. 74 and elsewhere.) It was no doubt in connection with these mathematical studies and the scientific taste awakened by them, that he undertook to answer the question concerning the ultimate basis of things in an unmythological form; and, on the other hand, it is consistent with the elementary character of these, the most ancient Greek mathematics, that his physics did not extend beyond a first beginning. He declared water to be the matter from which all things arose and of which they consist, and that the earth floats upon the water. Aristotle[1] speaks about the reasons of this theory, but only from his own conjecture, for he possessed no writing of Thales, and doubtless none existed; those which are mentioned by later writers, together with the doctrines quoted from them, are to be regarded as forgeries. As to the way in which things arise from water, Thales does not seem to have explained himself further; he probably thought that the efficient force was directly combined with matter, and conceived this force in the spirit of the old natural religion as analogous to living forces, as is seen in the assertions (Arist. 'De An.' i, 5, 411 a. 7. 19) that all is full of gods, and that the magnet has a soul—*i.e.* life—since it attracts iron. That he

[1] *Metaph.* i. 3, 983 b. 22. Theophrastus expresses himself more distinctly in Simpl. *Phys.* 23, 21 (Diels, *Doxogr.* 475); but he is here speaking of Thales and Hippo together, and may have found something in the latter about which nothing was recorded in reference to Thales.

expressly discriminated, on the other hand, the force that forms the world as God or Spirit or World-soul, from matter, we have no reason to suppose. But however meagre this first commencement of a physical theory may seem to us, it was of great importance that a beginning should be made. We find thus considerable progress already achieved by Anaximander.

§ 11. *Anaximander.*

This important and influential thinker was a fellow-citizen of Thales, with whose theories he must certainly have been acquainted. He was born in 611–610 B.C., and died soon after 547–6 B.C. (Diog. ii. 2). Pre-eminent in his time for astronomical and geographical knowledge, he prosecuted the cosmological inquiries raised by Thales with independent investigations, and wrote down the results in an original treatise which was early lost; being thus, side by side with Pherecydes, the oldest Greek prose writer, and the first philosophical author. He takes as the beginning of all things (ἀρχή) the unlimited (ἄπειρον), *i.e.* the infinite mass of matter out of which all things arise, and into which they return by their destruction, in order 'to render to each other atonement and punishment for their offence against the order of time.' (Simpl. 'Phys.' 24, 18). This primitive matter, however, he conceived neither as composed of the later four elements, nor as a substance intermediate between air and fire, or air and water,[1]

[1] As is maintained by several of the Greek commentators on Aristotle, partly in contradiction to their own statements elsewhere. The second of the assumptions given above is defended by Lütze, *Ueber das ἄπειρον A.'s* (Leipzig, 1878), and both together by Neuhäuser, *Anaximander Miles.* (1883), s. 44–273.

nor lastly as a mixture of particular substances in which these were contained as definite and qualitatively distinct kinds of matter.[1] From the express statement of Theophrastus (*ap.* Simpl. 'Phys.' 27, 17 ff. 154, 14 ff.), and from the utterances of Aristotle,[2] we may rather infer that Anaximander either distinguished his unlimited from all definite material substances, or, as is more likely, never explained himself at all concerning its particular nature, but meant by it matter in general, as distinct from particular kinds of matter. He argued, doubtless wrongly, that this primitive matter must be unlimited, or it would otherwise be exhausted in the creation of things.[3] As primitive matter the unlimited is underived and imperishable, and its motion is also eternal. From the latter doctrine follows the separation (ἐκκρίνεσθαι), of particular kinds of matter. First the warm and the cold were parted off; from both arose the damp, from the damp were separated the earth, the air, and the sphere of fire which surrounded the earth as a spherical crust. When this burst asunder wheel-shaped husks, filled with fire and having apertures, were formed: these being moved by currents of air, revolve around the earth, the shape of which is conceived as cylindrical, in an inclined horizontal direction. The fire

[1] On this assumption, upon which Ritter bases his division of the Ionic philosophers into Mechanical and Dynamic — an assumption which is still shared by some, see *Pre-Socratic Philosophy*, i. 240, *note* 4.

[2] *Phys.* i. 4, *init.* iii. 5, 204 b. 22. *De Cælo*, iii. 5, 303 b. 13 ff. Cf. *Pre-Socratic Philosophy* i. 256 ff.

[3] Arist. *Phys.* iii. 4, 203 b. 18; c. 8, 208 a. 8. Cf. Plut. *Placit.* i. 3, 4. (Stob. *Ecl.* i. 292) &c. *Pre-Socratic Philosophy* i. 234 ff.

which the wheel-shaped rings allow to stream forth from their apertures during their revolutions, and which is continually renewing itself by means of the exhalations of the earth, gives the appearance of stars moving through space; a conception which may seem very strange to us, but is in truth the first known attempt to explain the regular movement of the heavenly bodies mechanically, in the manner of the later theory of the spheres. The earth was at first in a fluid state; from its gradual drying up, living creatures were produced, beginning with men, who were first in the form of fishes in the water, which they only quitted when they had so far progressed as to be able to develop themselves on land. That Anaximander, in harmony with the presuppositions of his cosmology, held a periodical alternation of renewal and destruction of the world, and in consequence a series of successive worlds, without beginning or end, is maintained by a trustworthy tradition traceable to Theophrastus, and wrongly discredited by Schleiermacher.[1]

§ 12. *Anaximenes.*

Anaximenes, also a Milesian, is called by later writers the disciple of Anaximander, which is at least so far true that he clearly betrays the influence of his predecessor. His life may approximately be assigned to the years between 588 B.C. and 524 B.C.[2] Of a

[1] *Ueber Anaximandros*, Werke, 3 Abth. ii. 195 A.

[2] On the ground of the statement (Hippol. *Refut. hær.* i. 7), that his ἀκμή (=the 40th year of life) fell in Ol. 58, 1 (548 B.C.), and under this hypothesis that the data in Diog. ii. 3, can be changed, and that γεγένηται denotes the ἀκμή.

treatise of his in Ionic prose, only a small fragment has been preserved.

In his physical theory, Anaximenes differs from Anaximander in taking for his first principle not infinite matter without more precise determination, but with Thales a qualitatively determined matter; but he again coincides with Anaximander in choosing for this principle a substance to which the essential qualities of Anaximander's primitive essence, unlimitedness and unceasing motion, equally appeared to belong. In the air both are to be found. It not only spreads itself boundlessly in space, but is also conceived in perpetual motion and change, and proves itself (according to the ancient notion which makes the soul identical with vital air) to be the ground of all life and all motion in living beings. 'As the air as our soul holds us together, so the blowing breath (*πνεῦμα*) and the air embraces the whole world.' (Anax. *ap.* Plut. 'Plac.' i. 3, 6.) Through its motion, without beginning or end, the air suffers a change which is properly of a two-fold kind:—rarefaction (*μάνωσις, ἀραίωσις*) or loosening (*χαλαρόν, ἄνεσις*); and condensation (*πύκνωσις*) or contraction (*συστέλλεσθαι, ἐπίτασις*). The former is at the same time heating, and the latter cooling. Through rarefaction air becomes fire, through condensation it becomes wind, then clouds, water, earth, stones; an idea which Anaximenes no doubt deduced in the first instance from the atmospheric processes and precipitates. In the creation of the universe, the earth was first formed; according to Anaximenes, it is flat like a

plate, and therefore borne upon the air; the vapours ascending from it are condensed into fire; the stars are portions of this fire pressed together by the air; of a similar shape to the earth, they revolve around it laterally floating upon the air (supposing this was not intended to apply merely to the planets). According to credible testimony, Anaximenes agreed with Anaximander in maintaining an alternate construction and destruction of the world.

§ 13. *Later adherents of the ancient Ionian School. Diogenes.*

The school which the Milesian philosophers had founded in the sixth century also appears in the fifth. Hippo, who lived in the second third of this century, held with Thales that water, or more precisely the moist (ὑγρόν) was the primitive matter of the world. In this he was led by the analogy of animal life:[1] as also he regarded the soul as a moisture originating from the seed. From water arose fire, and from the conquest of water by fire, came the world. Anaximenes was followed in his doctrine by Idæus, who taught that the air was the primitive matter; those intermediate theories also which are mentioned (*sup.* p. 39, *note*), and which Aristotle repeats without naming their author, are mostly allied with those of Anaximenes. Even so late as 440–425 B.C. Diogenes of Apollonia

[1] According to the statement of Theophrastus, which is to be gathered from Simpl. *Phys.* 23, 18 f. Plut. *Plac.* i. 3, 1 (cf. Diels, *Doxogr.* 220). In regard to Thales this statement appears to rest on supposition only; in Hippo it seems to have the support of his treatise.

made an attempt to defend the monistic materialism of Anaximenes against Anaxagoras' doctrine of the world-forming Spirit; saying that Anaximenes found those qualities in the air itself, which Anaxagoras believed could be ascribed only to spirit. If, on the one hand (in opposition to the innumerable primitive substances of Anaxagoras), one common matter must be assumed for all things, as otherwise no mixture and reaction of them would be possible; and, on the other hand, this matter must be a thinking and rational essence: as is proved partly by its distribution according to design, and partly and especially by the life and thought of men and animals, we find these very characteristics united in air. It is air which ferments all things and (as soul) produces life, motion, and thought in animals. Air is therefore, according to Diogenes, the underived, unlimited rational essence which governs and orders all things. All things are merely transformations of air (ἑτεροιώσεις). Their transformation (according to Anaximenes) consists in rarefaction and condensation, or, which is the same, in heating and cooling. The denser and heavier sank down, the lighter ascended, and thus the two masses were separated from which, in further process of development, the earth and the heavenly bodies arose through the revolution effected by the warm. From the terrestrial slime (no doubt by the influence of the solar heat), plants, animals, and human beings were produced: the soul of living creatures consists of a kind of air which though not nearly so warm as that of the sun, is warmer than the atmospheric air.

On the particular character of this air, that of the various kinds of living creatures depend. The phenomena of corporeal and animate life, especially the circulation of the blood and the activity of the senses, Diogenes endeavoured not without ingenuity to explain by means of his theory. He agreed with the ancient Ionians and with Heracleitus in maintaining an infinite series of successive worlds.

B. THE PYTHAGOREANS.

§ 14. *Pythagoras and his School.*

The history of Pythagoras was very early overgrown with many unhistorical legends and conjectures, and became so more and more as it was handed down by successive traditions. His doctrine also, especially after the rise of the Neo-Pythagorean school, and the extensive forgeries of Pythagorean writings which prevailed there, has been so mixed up with later elements that it requires the most careful criticism to distinguish the unhistorical constituents in the accounts preserved. As far as the history of the Pythagorean school and its founder is concerned,[1] a higher degree of certainty can only be attained in regard to a few main points, and as to their doctrines only for such portions as we can learn from the genuine fragments of Philolaus,[2] the utterances of Aristotle, and those statements

[1] On the Greek biographies of Pythagoras known to us, cf. p. 9, 12 f.

[2] All the fragments of Philolaus have been edited by Boeckh, *Philolaos der Pythagor. Lehren* (1819). When I had proved that a part of them were forgeries, Schaarschmidt (*Die angebl. Schriftstellerei d. Philol.* 1864), attempted to prove the same of all. Repeated examination only

of the later doxographers which we are justified in referring to Theophrastus.[1]

Pythagoras, the son of Mnesarchus, was born in Samos, whither his ancestors, who were Tyrrhenian Pelagians, had migrated from Phlius. From the inexact statements in respect to the time when he lived, which are often contradictory in particular details, this much only can be accepted as probable, that he was born about 580–570 B.C., came to Italy about 540–530 B.C., and died towards the end of the sixth or soon after the beginning of the fifth century. Even Heracleitus calls him the most learned man of his time,[2] but how and where he gained his knowledge we do not know. The statements of later writers concerning his travels and the culture acquired in the course of them in the countries of the South and East, by reason of the untrustworthiness of the authorities, lateness of the accounts, and the suspicious circumstances (mentioned *supra*, p. 19) under which they appeared, cannot be regarded as traditions based upon historical recollection, but only as conjectures to which

proves to me that the fragments from the treatise περὶ ψυχῆς are not genuine, and that the rest of the fragments, which are in part confirmed by Aristotle, are genuine. Cf. *Pre-Socratic Philosophy*, 318 *note* 2, 392 ff., 446 ff.

[1] Among the later accounts of the Pythagorean philosophy we may mention, besides well-known and more comprehensive works, Chaignet's *Pythagore et la phil. pyth.* (2 vols. 1873) as a careful book, though giving too much weight to untrustworthy authorities. Röth's uncritical and romancing *Gesch. uns. abendländischen Philosophie*, vol. ii. (1858), can only be used with the greatest care.

[2] *Fr.* 17. Byw; in Diogenes, viii. 6. Πυθαγόρης Μνησάρχου ἱστορίην ἤσκησε ἀνθρώπων μάλιστα πάντων καὶ ἐκλεξάμενος ταύτας τὰς συγγραφὰς (to what treatises this refers we do not know) ἐποίησε ἑαυτοῦ σοφίην πολυμαθίην κακοτεχνίην. Cf. Herod. iv. 95. Ἑλλήνων οὐ τῷ ἀσθενεστάτῳ σοφιστῇ Πυθαγόρῃ.

the doctrine of transmigration and some Orphic-Pythagorean usages especially gave rise. Even as to the presence of Pythagoras in Egypt, to which no internal improbability is opposed, nothing is known according to all appearance in the older tradition. The earliest evidence for it is an oration of Isocrates which does not even lay claim to historical credibility ('Busir.' 11, 28, cf. 12, 33); Herodotus (ii. 81, 123, cf. c. 49, 53) seems to be quite unacquainted with any sojourn of Pythagoras in Egypt; and by the 'philosophy' which he transplanted thence to Greece even Isocrates doubtless means not so much any scientific doctrines as his whole reformatory procedure. In regard to Plato and Aristotle it is (*vide sup.* p. 21) very improbable that they derived so influential a system as the Pythagorean from Egypt. The statement that Pherecydes was his instructor (attested from the middle of the fourth century *ap.* Diog. i. 118, 119, and others) is more trustworthy, but also not certain; and though the assertion that he was a disciple of Anaximander (*ap.* Porph. 'Vit. Pyth.' 2, 11) seems to rest on a mere conjecture, it is probable (*vide sup.* p. 41) that the astronomical theory of Anaximander influenced that of Pythagoras. Having begun his activity in his home as it appears, he found its chief sphere in Lower Italy (*vide sup.*). He settled in Crotona and established an association there which found numerous adherents among the Italian and Sicilian Greeks. The later legend describes his position in these regions as that of a prophet and worker of miracles, his school as a society of ascetics living under a strict rule and having

their goods in common, abstaining from flesh diet, beans, and woollen clothing, and sworn to inviolable secrecy with regard to their order. From an historical point of view the Pythagorean society appears primarily as a form of the mysteries then in vogue; the orgies mentioned by Herodotus (ii. 81) form its centre, the doctrine of the transmigration of souls mentioned by Xenophanes (*ap.* Diog. vi. 36) is its leading dogma. From the initiated purity of life was demanded (*πυθαγόρειος τρόπος τοῦ βίου*, Plato, 'Rep.' x. 600 B), which enjoined on them however, according to the best testimonies, only a few abstinences, and these not of an oppressive nature. The Pythagorean society was distinguished from all kindred phenomena by the ethical and reformatory character which was here given to the mystic dogma and to the cultus of Pythagoras, and the endeavour to educate its members, in harmony with the Doric customs and view of life, to bodily and mental soundness, to morality and self-control. With this endeavour was combined not only the cultivation of many arts and crafts, of gymnastic, music, and medicine, but also scientific activity, which was practised within the society after the example of its founder, and participation in which, apart from the mysteries of the school, was probably seldom attained by any except the members. The mathematical sciences until the beginning of the fourth century had their chief seat in the Pythagorean school: with them was connected that doctrine of nature which formed the essential content of the Pythagorean system of philosophy. That an ethical reform like that attempted by Pythagoras must of necessity become a political reform was inevitable

among the Greeks of that period; in their politics the Pythagoreans, in accordance with the whole spirit of their doctrine, were upholders of the Dorian aristocratic institutions, which had for their end the strict subordination of the individual to the whole, and they governed by their influence many of the cities of Magna Græcia in this spirit. Meanwhile this political attitude of the Pythagorean society gave occasion to frequent attacks upon it, which determined Pythagoras himself to remove from Crotona to Metapontum, where he died. After many years of irritation, the burning of the Pythagorean meeting-place in Crotona, probably about 440–430 B.C., gave the signal for a persecution that extended itself over the whole of Lower Italy, in which many of the Pythagoreans lost their lives, and the remainder were dispersed. Among these fugitives, through whom middle Greece first became acquainted with Pythagoreanism, were Philolaus (*sup.* p. 45 *note* 2) and Lysis, the teacher of Epaminondas, who both lived in Thebes. Eurytus was a disciple of the former, and his scholars are mentioned by Aristoxenus as the last Pythagoreans. About the beginning of the fourth century we meet with Cleinias in Tarentum, and soon afterwards with the famous Archytas, through whom Pythagoreanism once more attained the leadership of a great community; soon after his time the Pythagorean science, even in Italy, appears to have been extinguished or to have sunk into a state of insignificance, while the Pythagorean mysteries, on the contrary, not only maintained themselves but even spread and increased.

§ 15. *The Pythagorean System: Number, and the Elements of Number.*

As the practical endeavours of Pythagoras had for their object the harmonious and orderly shaping of human life, so the theory of the world which is connected with them, and the leading ideas of which no doubt originated with Pythagoras, kept mainly in view that order and harmony through which the totality of things is combined into a beautiful whole, a cosmos; and which is chiefly perceptible to us in harmony of tones, and in the regular motion of the heavenly bodies. The reason of this, as the Pythagoreans as mathematicians remark, is that everything in the world is ordered according to numerical relations; number, according to Philolaus (*ap.* Stob. 'Ecl.' i. 8), is that which makes the hidden cognisable, rules divine things (the cosmos), and the works of men, music, and handicraft, and allows no falsehood. All is so far formed according to number.[1] But to their unpractised realistic thought this proposition is immediately converted into another —namely, that number is the essence of things, that all is number, and consists of number; and to cancel the obscurity which herein lies, and to ascribe to the Pythagoreans a definite distinction between numbers and things ordered according to numerical relations, would be to mistake the peculiar character of their whole point of view.

Numbers are some of them odd and some even, and individual numbers are also composed of these

[1] Arist. *Metaph*, i. 6, 987 b. 11, μιμήσει τὰ ὄντα φασὶν εἶναι τῶν ἀριθμῶν.

constituents. Uneven numbers are those which set a limit to bi-partition; the even are those which do not; the former are limited, the latter unlimited. From this the Pythagoreans concluded that the odd and even, or, as it is more generally expressed, the limiting [1] and the unlimited, are the fundamental constituents of numbers and of all things (the *πράγματα ἐξ ὧν συνέστα ὁ κόσμος*, Philol.). And as the limited was held by the Greeks to be more perfect than the unlimited and formless, and the odd number more lucky than the even, they connected therewith the assertion that the opposition of the limited and unlimited, of the better and the worse, runs through everything, and a table of ten opposites was drawn up (no doubt first by later members, such as Philolaus), which was as follows:—1. limited and unlimited; 2. odd and even; 3. one and many; 4. right and left; 5. masculine and feminine; 6. rest and motion; 7. straight and crooked; 8. light and darkness; 9. good and evil; 10. square and oblong.

On account of this opposition in the primary constituents of things, a principle was necessary to unite the opposites; this principle is harmony, as 'unity of the manifold,' and 'agreement of the discordant.' Since therefore all is called number, it may also be said that all is harmony; but, owing to the obscurity of the school in co-ordinating the particular and the universal, the symbol and the conception designated by it, no attempt is made to discriminate not only

[1] Called by Philol. (*Fr.* i.) *περαῖνον*: in Plato and Arist. we have *πεπερασμένον*, *πέρας ἔχον*.

harmony in the cosmic sense from musical harmony, but musical harmony from the octave, which was also called 'Harmony.'

§ 16. *The Pythagorean Physics.*

In applying their doctrine of numbers to given phenomena, the procedure of the Pythagoreans was for the most part very arbitrary aud unmethodical. When they found a number or a numerical relation in anything, they explained it as the essence of the thing; thus, not unfrequently the same object was designated by different numbers, and still more commonly the same number was used for the most various objects, and these consequently, no doubt, were placed in relation one with another (*e.g.* the καιρός, and the sun), But a more methodical development of the doctrine of numbers was attempted when the various classes of things were arranged according to numbers, and their qualities were explained by numbers. The fundamental scheme of numbers is itself the decadal system; each of the first ten figures has its own power and significance. Among these the decad is pre-eminent as the perfect all-embracing number; next to it the potential ten, the Tetractys with which the well-known form of oath was connected. On numerical relations, as the Pythagoreans (and, it is said, their founder) first discovered, the acuteness and concord of tones are founded; the relation of these tones, determined by the length of the vibrating strings, and computed according to the diatonic division of the heptachord (later, octachord), is thus given by Philolaus (*ap.* Stob.

'Ecl.' i., 462): for the octave (ἁρμονία, later διὰ πασῶν) 1 : 2; for the fifth (δι' ὀξεῖαν, later διὰ πέντε) 2 : 3; for the fourth (συλλαβά, later διὰ τεσσάρων) 3 : 4; for the tone 8 : 9. From numbers were derived geometrical forms (in which Greek mathematics were accustomed to exhibit numerical relations); two was called the number of the line, three the number of the plane, four of the solid. Philolaus made the elementary nature of matter dependent on the form (of its smallest parts); for of the five regular solids he assigned the tetrahedron to fire, the octahedron to air, the icosahedron to water, the cube to the earth, the dodecahedron to the universe (perhaps to the æther). The eternity of the world is attributed to Pythagoras only by later writers, in contradiction to Aristotle. The formation of the world began from the one, *i.e.* from the fire of the centre; and this fire attracted to itself and limited the nearest portions of the unlimited. In it lies the central point and union of the world, it is 'Hestia,' 'the citadel of Zeus,' &c. Around this central fire the earth, together with the other heavenly bodies, moves; and here for the first time the thought appears of explaining the daily motion of the heaven by a motion of the earth. But in order to preserve the perfect number ten for these heavenly bodies, the counter-earth is inserted between the earth and the central fire. This astronomical system, which can be proved to have been held by Philolaus, seems to have first proceeded from the successors of Pythagoras; the doctrine of the spheral harmony, which, starting from the popu-

lar conception, treats the seven planets as the sounding strings of the heavenly heptachord, is more ancient. The theory of a world-soul was attributed to the Pythagoreans in spurious writings of a Neo-Pythagorean origin; but it is clear from what Aristotle says that it was foreign to them. Nor do they seem to have instituted any more particular inquiries in regard to the human soul. Aristotle only states in regard to this subject that they held the solar corpuscles, or, also, that which moves them, to be souls ('De An.' i. 2, 404 a. 16); in 'Metaph.' i. 5, 985 a. 30, he also enumerates under the category of things reduced by the Pythagoreans to number, soul and understanding (*νοῦς*); and thereby confirms the statement (Iambl. 'Theol. Arith.' 56) that Philolaus, in connection with his derivation of the body (*sup.* p. 53), assigned the physical qualities to the number five, animation to six, intelligence (*νοῦς*), health, and 'light' to seven, and love, wisdom, and practical knowledge to eight. The soul is also described as harmony, perhaps likewise as the harmony of the body; and it may be true that Philolaus placed the seat and germ (*ἀρχά*) of reason in the head, that of the soul in the heart, that of growth and germination in the navel, that of seed and generation in the sexual parts. The further particulars handed down by tradition as belonging to the ancient Pythagoreans, but bearing a stronger resemblance to the Platonic psychology, are not to be considered authentic.

§ 17. *Religious and Ethical Doctrines of the Pythagoreans.*

Together with the scientific determinations of the Pythagorean system, a number of doctrines have been handed down to us as Pythagorean, which arose independently, and have been brought into very slight combination, or none at all, with those determinations. To these belong first of all the doctrine of the transmigration of souls, taken by Pythagoras from the Orphic mysteries (*sup.* p. 48), and the theory connected with it (mentioned by Eudemus as Pythagorean) that after the expiration of the Great Year (probably reckoned at 10,000 years) the previous course of the world down to the smallest details will be repeated. Likewise the belief in demons, by which are chiefly meant the souls waiting in Hades, or floating about in the air (*vide* p. 54). Finally some theological utterances attributed to Philolaus of which the one that recalls Xenophanes and his purer conception of God has no certain authority, and the rest bear no philosophical stamp. The *ethical* precepts of the Pythagoreans were combined, by means of the doctrine of future retribution, with the dogma of transmigration of souls; but this religious motive which is not exclusively Pythagorean, has nothing in common with a scientific foundation of ethics. Nor is such a foundation to be found in the practical rules and prescripts which have been handed down to us partly in symbolical maxims, and partly in other forms. A collection of such prescripts (dating at earliest from the third

century before Christ) contains the so-called Golden Poem (a second, probably enlarged by his own additions, was composed by Aristoxenus, vide *sup.* p. 10). The ethical principles of the Pythagoreans here find expression; they require reverence for the gods, the government, and the laws, love of country, fidelity to friends, self-examination, temperance, and purity of life, but these demands are as little based on scientific formulæ as in the proverbial maxims of the people and the poets. The only authenticated attempt to apply their theory of numbers to the sphere of ethics lies in the proposition that justice is an equal number multiplied by an equal (or more accurately that it is one of the two first square numbers, four and nine), because it returns equal for equal. It may also be true that they described virtue as harmony, which, however, asserts nothing particular about it. Though the ethical tendency of the Pythagorean society was most valuable, therefore, from a practical point of view, the contribution of Pythagorean philosophy to the scientific treatment of ethical questions was but meagre; for the necessity of such a treatment, as distinguished from directly ethical and religious exhortation, was not yet experienced.

§ 18. *Pythagoreanism in Combination with other Doctrines.*

A combination of the Pythagorean doctrine with other standpoints produced the physical theories of Hippasus and Ecphantus. Hippasus of Metapontum (about 450 B.C.), who is generally described as a

Pythagorean, seems to have combined the Pythagorean central fire with the first principle of Heracleitus; for he declared fire to be the primitive matter of the world. Ecphantus (who lived, it would appear, about the beginning of the fourth century) united the doctrine of the Pythagoreans with that of Democritus; instead of the units, which are the elements of number, he substituted corporeal atoms; but he assumed, like Anaxagoras, that a Divine spirit had formed the world. Previous to his time, Hicetas of Syracuse, with whom he herein agrees, had exchanged the movement of the earth around the central fire for a movement round its own axis. That, on the other hand, philosophers who did not belong to the Pythagorean society were affected by certain of its doctrines, is shown, not only by the examples of Parmenides and Empedocles, but also by that of Alcmæon, the Crotoniate physician (first half of the fifth century). When he remarks that human life moves between opposites, we are reminded of the corresponding doctrine of the Pythagoreans; and there is a reminiscence of their doctrine of immortality in his saying that the soul is immortal, for it resembles the imperishable heavenly natures, the stars being like them involved in perpetual motion. In the fragments also of the famous comic poet, Epicharmus (about 550–460 B.C.), we find, together with certain propositions of Xenophanes and Heracleitus, the Pythagorean doctrine of immortality; but we are not justified in calling him, as some of the ancient philosophers do, a Pythagorean.

C. THE ELEATICS.

§ 19. *Xenophanes.*

The founder of the Eleatic, as of the Pythagorean school, was an Ionian who had immigrated into Lower Italy. Born about 576–2 B.C. (Ol. 50, as Apollodorus probably said, instead of Ol. 40, which was maintained by tradition), he travelled as a poet and rhapsodist for many years through the cities of Greece, and finally settled at Elea, where he died, having passed his ninety-second year (therefore in 480 B.C.). His 'polymathy' is spoken of even by Heracleitus ('Fr.' 16, *ap.* Diog. ix. 1); Theophrastus (*ap.* Diog. ix. 21) describes him as a disciple of Anaximander. His poems were on many and various subjects; we are indebted for our knowledge of his philosophical theories to the fragments of a didactic poem (*περὶ φύσεως* [1]), and the communications of Aristotle and Theophrastus (*ap.* Simpl. and others; Diels, 'Doxogr.' 480 f.) which come from it; on the other hand the supposed Aristotelian treatise, 'De Melisso, Xenophane, et Gorgia,' is neither a work of Aristotle or Theophrastus, nor a trustworthy account of the doctrine of Xenophanes. The starting-point of that doctrine seems to have been the bold criticism of the Greek popular belief, by which Xenophanes assumes such an important place in the history of Religion. His irony and aversion are excited not only by the human form of the gods and the

[1] Collected and edited by Karsten, *Philosoph. Griech. Rel.* i. 1835. Mullach, *Arist. De Melisso*, &c., 1845. *Fragm. Phil. Gr.* i. 101 ff.

unworthy stories about them related by Homer and Hesiod; he finds also that their plurality is incompatible with a purer conception of Deity. The Best, he says, can only be One; none of the gods can be governed by another. As little can we suppose that the gods had a beginning, or wander about from one place to another. There is therefore only one God, 'neither comparable to mortals in shape, nor in thoughts,' 'all eye, all ear, all thought,' 'who without trouble, by his thought, governs all things.' With Xenophanes, however, this God coincides with the world. When he looked around upon the universe, he declared the One (or as Theophrastus, *ap.* Simpl. 'Phys.' 22, 30, says: τὸ ἓν τοῦτο καὶ πᾶν) to be the Deity (Arist. 'Metaph.' i. 5, 986 b. 20); that he was the first to bring forward the doctrine that all things are One, is known from Plato ('Soph.' 242 D). This One Divine Being is eternal and unchangeable; whether limited, or unlimited, Xenophanes, according to the explicit testimony of Aristotle and Theophrastus, did not discuss; when, therefore, in the treatise 'De Mel.' 3, 977 b. 3, it is expressly proved to be neither limited nor unlimited, the statement deserves no credence. It is more likely that he spoke in another connection of the infinity of the space of the air and of the depths of the earth, and, on the other hand, of the spherical shape of the heavens, without inquiring how the two ideas were compatible, and without referring these expressions to the Divine nature. That he declared the world to be underived and imperishable is also credible; in saying this, however, he can only have had its material substance

in view, for in regard to the universe he did not assert it; the earth, according to his theory, formed itself from the sea, as he proved from the petrifactions he had observed, and would again partially sink into it; the sun and the stars he supposed to be burning masses of vapour, which are formed anew every day. With the earth the human race will also be destroyed, and at its new construction will be again created (from it, *vide sup.* p. 41). When the later sceptics reckoned Xenophanes among themselves, they were able to appeal in support of this assertion to expressions of his which deplore the uncertainty and limitation of human knowledge; but the dogmatic tenor of his other doctrines shows, notwithstanding, how far he was from scepticism on principle.

§ 20. *Parmenides.*

If Xenophanes maintained the unity and eternity of God and the universe, Parmenides ascribed the same qualities to all reality, as the inevitable inference from that conception; and plurality and variability of things were consequently explained as mere appearance. This great thinker, who was so revered in antiquity, and especially by Plato, according to his representation in the 'Parmenides,' cannot have been born earlier than 520–515 B.C. This statement, however, probably belongs to the anachronisms of which Plato allows himself so many on artistic grounds; and Diogenes (ix. 23) is nearer the truth when (doubtless following Apollodorus) he places his most flourishing period (*ἀκμή*, usually assigned to a man's fortieth year),

in Ol. 69, and therefore his birth in Ol. 59 (544–0 B.C.). Two Pythagoreans influenced his education, and he himself is said to have led a Pythagorean life, but in his philosophical theories he is allied to Xenophanes.[1] The conception from which he starts is that of the existent in its opposition to the non-existent; but by the existent he understands not the abstraction of pure being, but the 'full,' the mass that fills space, without any more precise definition. 'Only being is, non-being is not and cannot be thought' ('Fr.' 33 ff. 43 f. M) this is the fundamental principle from which he derives all his determinations of being. Being cannot begin or cease to be, for it can neither come from non-being nor become non-being; it never *was*, and never *will be*, but *is* undividedly present (*νῦν ἔστιν ὁμοῦ πᾶν ἓν ξυνεχές*). It is indivisible, for it is that which it is, everywhere equally, and there is nothing by which it could be divided. It is unmoved, complete in itself, everywhere self-identical, and may be compared with a well-rounded sphere, spreading itself equally from the centre to all sides. Thought, moreover, is not distinct from being, for it is thought of the existent. Only *that* knowledge therefore has truth which shows us in all things this one invariable being, and this is reason (*λόγος*). The senses, on the other hand, which show us a multiplicity of things, origin, decay, and change, are the sources of all error.[2]

[1] The fragments of his poem *περὶ φύσεως* will be found in Karsten, *Philosoph. Gr. Rel.* i. 2; Mullach, in the works mentioned, p. 58; Th. Vatke, *Parm. Doctrina*, Berl. 1864; Stein, in the *Symb. Philol. Bonnens.* Leipzig, 1864 ff. p. 763 ff.

[2] On the other hand, I cannot agree with the view of Bernays

Parmenides nevertheless undertook to show, in the second part of his poem, how the world was to be explained from the standpoint of the ordinary mode of presentation. In truth, only being exists; the opinion of man places non-being beside it, and thus explains all things out of two elements, of which one corresponds to being, the other to non-being: namely, light or fire (*φλογὸς αἰθέριον πῦρ*), and 'night' or the dark, the heavy and the cold, which Parmenides also called earth. According to Theophrastus, he also described the former as the active principle, and the latter as the passive principle; placing, however, beside them the mystic form of the goddess who guides all things. He undertakes to show how upon these presuppositions we can explain to ourselves the origin and constitution of the world; but very few of these explanations have come down to us. He describes the universe as composed of the earth and the various spheres grouped around it, and spanned by the steadfast arch of heaven. Of these spheres some are light, some dark, and some mixed. He seems to have supposed that men originated from terrestrial slime. Their thoughts and perceptions are regulated according to the material constituents of the body; each of the two elements recognises that which is akin to it, the character of the presentations depends on which predominates; they have therefore greater truth when the warm element is in the ascendant.

and others that Parmenides was thinking of Heracleitus in his criticism of those who regard being and non-being as the same. Cf. *Pre-Socratic Philosophy*, ii. 109.

§ 21. *Zeno and Melissus.*

A third generation of Eleatic philosophers is represented by Zeno and Melissus. Zeno of Elea, whose heroic death in withstanding a tyrant is so celebrated, was the favourite disciple of Parmenides, and according to Plato ('Parm.' 127 B), twenty-five years his junior. In a prose treatise written in his earlier life, he defended the doctrine of Parmenides in an indirect manner, by refuting the ordinary mode of presentation with such skill that Aristotle (according to Diog. viii. 57, ix. 25), calls him the inventor of Dialectic. The arguments of Zeno, as far as we are acquainted with them, are directed partly against the theory of a plurality of things, and partly against motion. The argument against multiplicity is as follows: (1) If being were many, it must be infinitely small as well as infinitely great:—infinitely small, because the units of which it is composed must be indivisible, and consequently without magnitude; infinitely great, because each of its parts must have a part before it, from which it is separated, this in like manner must be preceded by another part, and so *ad infinitum*. (2) Again, were being many, it must in respect to number be limited as well as unlimited: limited because there would be no more things than there are; unlimited, because in order to be many, between two things there must in every case be a third, and this third thing must have another between itself and each of the other two; and so on for ever. (3) Since all things exist in a space, space itself must be in a space, and the space in which it is

must be so, and so on *ad infinitum*. (4) Finally it is maintained that if the shaking out of a bushel of corn produces a sound, each grain and each part of a grain must do so. But the four arguments against *motion* are still more famous and important (Arist. 'Phys.' vi. 9, and his commentators). The first is this:—In order to have traversed a certain distance, a body must first have accomplished half of that distance, and in order to have arrived at the half, it must first have reached the half of that half, and so forth. That is, it must in a limited time have gone through spaces unlimited in number. (2) Another application of the same argument (the so-called Achilles). Achilles cannot overtake the tortoise, if it has at all got the start of him; for while he arrives at the standpoint A of the tortoise, the tortoise has arrived at a second, B; when he reaches B, the tortoise has arrived at C, and so on. (3) The flying arrow is at rest, for it is at each moment only in one and the same space; it rests, therefore, in every moment of its flight, and consequently also during the whole time of it. (4) Equal spaces must be traversed in equal time, if the speed be equal. But a body in motion passes another body twice as fast if the latter is moving towards it with equal speed as if that other were at rest. Therefore the laws of motion are here in opposition to the facts. At a later period, these arguments were used in the interests of scepticism; Zeno himself only designed them to support the propositions of Parmenides, but from the manner in which he pursued this end he gave a powerful impulse

not only to the development of Dialectic, but also to the discussion of the problems involved in the conceptions of space, time, and motion.

Melissus of Samos, the same who as navarch in 442 B.C. conquered the Athenian fleet, set forth in his treatise περὶ φύσεως[1] Parmenides' doctrine of Being. In this, while defending the doctrine against the 'Physicists,' among whom were included, as it would seem, Empedocles and Leucippus, he sought at the same time points of contact with it even in them. He proved the eternity and imperishableness of Being with the same arguments as Parmenides; but differed from him in drawing from thence the inadmissible conclusion that Being must also be unlimited in space. He sought, however, to establish this doctrine by denying the existence of empty space; and further applied this denial of the void to oppose the theory of a plurality of things. For he steadily maintained, with Parmenides, the unity and indivisibility of Being. With him also he denied all change and motion, and in consequence (in opposition to Empedocles) all division and mixture. He also applied the argument that the void is inconceivable against motion in space; for without the void neither motion nor rarefaction and condensation would be possible. Lastly, with Parmenides, he rejected the evidence of the senses, charging them with the contradiction that things often show themselves changed in the sequel, which would be impossible

[1] The fragments in Ionic prose in Mullach, *Fragm. Phil.* i. 259 ff., and previously in his edition of Arist. *De Melisso.*

if they were really so constituted as they at first represented themselves to us.

II. The Physicists of the Fifth Century B.C.

§ 22. *Heracleitus.*

Heracleitus was an Ephesian of noble family, a contemporary of Parmenides (concerning his relation to him, *vide supra*, p. 61 *note* 2); his death may be placed about 475 B.C., his birth, if he was really sixty years old when he died (Diog. viii. 52), in 535 B.C. Of an earnest and thoughtful turn of mind, full of contempt for the doings and opinions of men, and not satisfied even with the most honoured sages of his time and nation, he went his own way in pursuing his inquiries (ἐδιζησάμην ἐμεωυτόν, 'Fr.' 80; εἷς ἐμοὶ μύριοι, 'Fr.' 113). The results he laid down in his treatise without particular demonstration, in pregnant, picturesque sentences, which were often oracular and laconic to the point of obscurity. This mode of exposition gained him the surname of the Obscure (first found in Ps. Arist. 'De Mundo,' c. 5). To himself it seemed to correspond with the dignity of the subject-matter, and to us it gives a true representation of his thought, moving as it did more in intuitions than in conceptions, and directed rather to the combination than the discrimination of the manifold.[1]

[1] His fragments are collected and treated of in monographs by Schleiermacher, *Herakleitos* (1807); (*Werke*, *z. Phil.*, ii. 1–146); Lassalle, *Die Philos. Herakleitos d. Dunkeln*, 1858, 2 Bde.; Schuster, *Heraklit*, 1873; Mullach, *Fragm. Phil.*, i. 310 ff.; Bywater, *Heracliti Reliquiæ*, Oxford, 1877 (I quote from this

Like Xenophanes and Parmenides, Heracleitus starts from the consideration of nature, and he too regards it as a uniform whole, which as such neither arose nor passes away. But while they fix their attention so exclusively on the continuance of substance in the universe that the plurality and change of phenomena are altogether cancelled in a mere appearance, Heracleitus, on the contrary, is so profoundly impressed with the ceaseless change of things, the transitoriness of all the particular, that he sees in it the most universal law of the world, and can only regard the cosmos as being involved in continual change, and transposed into perpetually new shapes. All things are in constant flux, nothing has permanence :[1] 'he cannot descend twice into the same stream' ('Fr.' 41, 81); everything is continually passing over into some thing else, and this proves that it is one nature which assumes the most opposite forms, and pervades the most various conditions, that 'All comes from One, and One from All' (Fr. 59); 'God is day and night, summer and winter, war and peace, satiety and hunger' ('Fr.' 36). But this essential nature, according to Heracleitus, is fire. 'This world, the One for All, neither one of the Gods nor of the human race has made; but it ever was, and is, and shall be, an eternally living fire' ('Fr.' 20). The foundation of this theory ultimately lies in the fact that fire appears to the philosopher to be the substance

edition). Further the reader may compare Bernays, *Heraclitea*, 1848; Id. *Rhein. Mus.*, N. F. vii. 90 ff., ix. 241 ff.; Teichmüller, *Neue Studien zur Gesch. der Begriffe*, i. H., 1876.

[1] πάντα ῥεῖν, εἶναι δὲ παγίως οὐθέν. Arist. *De Cœlo*, iii. i. 298 b. 29. τὰ ὄντα ἰέναι τε πάντα καὶ μένειν οὐδέν. . . πάντα χωρεῖ καὶ οὐδὲν μένει. Plato, *Crat.* 401 D, 402 A.

which least of all has a permanent consistency or allows it in another; and he consequently understood by his fire not merely flame, but warmth in general; for which reason it is also designated as vapour (*ἀναθυμίασις*) or breath (*ψυχή*). Things arise from fire through its transmutation into other substances, and in the same way they return to it again. 'All is exchanged for fire, and fire for all, as wares for gold, and gold for wares' ('Fr.' 22). But as this process of transformation never stands still, it never produces anything permanent; everything is conceived as in perpetual transition from one state into its opposite, and therefore has the contradictions, between which it moves, contemporaneously present in itself. Strife (*πόλεμος*) is the rule of the world (*Δίκη*), the father and king of all things ('Fr.' 62, 44). 'That which strives against another supports itself' (*ἀντίξουν συμφέρον*, 'Fr.' 46). 'That which separates, comes together with itself' ('Fr.' 45, according to Plato, 'Sophist.' 242 D). 'The harmony of the world rests upon opposite tension, like that of the lyre and the bow' (*παλίντονος*, others read *παλίντροπος*, *ἁρμονίη κόσμου ὅκωσπερ λύρης καὶ τόξου*, 'Fr.' 56). Heracleitus spoke, therefore, of Zeus-Polemos, and censured Homer for disparaging Discord. But not less strongly did he maintain that the 'hidden harmony' of nature ever reproduces concord from oppositions, and that the divine law (*δίκη*), fate, wisdom (*γνώμη*), the universal reason (*λόγος*), Zeus, or the Deity, rules all things, the primitive essence recomposes itself anew in all things according to fixed laws, and again retires from them.

In its transmutation the primitive essence passes through three fundamental forms: out of fire comes water, from water, earth; and in the opposite direction from earth comes water, and from water, fire. The former is the way downwards, the latter the way upwards, and that both lie through the same stages is asserted in the sentence ('Fr.' 69), 'the way upwards and the way downwards is one.' All things are continually subject to this change, but they appear to remain the same so long as the same number of substances of a particular kind flows into them from the one side as they give off on the other. A prominent example of this change is afforded by Heracleitus's proverbial opinion that the sun is new every day, for the fire collected in the boat of the sun is extinguished in the evening and forms itself afresh during the night from the vapours of the sea. Heracleitus (in harmony with Anaximander and Anaximenes) applies the same point of view to the universe. As the world arose from the primitive fire, so when the cosmical year has run its course it will return to primitive fire again, by means of conflagration, in order to be again reconstituted from the same substance after a fixed time; and thus the history of the world is to move, in endless alternation, between the state of divided being (*χρησμοσύνη*), and that of the union of all things in the primitive fire (*κόρος*). When Schleiermacher, Hegel, and Lassalle deny that Heracleitus held this doctrine, their opinion contradicts not only the unanimous testimony of the ancients since Aristotle, but likewise the utterances of Heracleitus himself, nor can

it be supported by the passage in Plato, 'Soph.' 242 C f.

The soul of man is a part of this divine fire; the purer this fire, the more perfect is the soul: 'the dry soul is the wisest and best' ('Fr.' 74). As, however, the soul-fire is subject like all else to perpetual transmutation, it must be supplied by the senses and the breath from the light and the air without us. That it should not be extinguished at the departure of the soul from the body, but should continue in an individual existence, and that Heracleitus should accordingly maintain like the Orphics that the souls passed from this life to a higher—for all this, his physical theory affords no justification. On the other hand it is quite consistent that the philosopher who, in the change of individual things, regards nothing but the universal law as permanent, should only ascribe value to rational knowledge, directed to the common element ('Fr.' 91), should declare eyes and ears to be 'bad witnesses' ('Fr.' 4), and should set up for practical conduct the principle that all human laws sustain themselves by One, the Divine ('Fr.' 91); this, therefore, man must follow, but 'he must extinguish arrogance like a conflagration' ('Fr.' 103). From trust in the divine order of the world arises that contentment (*εὐαρέστησις*) which Heracleitus is said to have declared to be the highest good; the happiness of man, he is convinced, depends upon himself: *ἦθος ἀνθρώπῳ δαίμων* ('Fr.' 121). The well-being of the commonwealth depends upon the dominion of law: 'the people must fight for law as for its walls' ('Fr.' 100);

but this also is law, says the aristocratic philosopher, to follow the counsel of an individual ('Fr.' 110); and against the democracy which had banished his friend Hermodorus he launches the most violent censure. With the same rude independence he opposed himself to the religious opinions and usages of his people, attacking with sharp language not only the Dionysiac orgies, but also the worship of statues and bloody sacrifices.

The school of Heracleitus not only maintained itself till the beginning of the fourth century in his own country, but also found encouragement in Athens; Cratylus, the teacher of Plato, belonged to it. But these later Heracleiteans, and Cratylus in particular, had become so unmethodical and fanatical in their procedure, and had fallen into such extravagances, that Plato and Aristotle both use very contemptuous language respecting them.

§ 23. *Empedocles.*

Empedocles of Agrigentum was born about 495–0 B.C., and died at the age of sixty, about 435–0 B.C. By his impassioned eloquence and practical energy, he, like his father Meton, long maintained himself at the head of the Agrigentine democracy; but he attached still more importance to the functions of religious teacher, prophet, physician, and worker of miracles, which his remarkable personality, resembling that of Pythagoras, enabled him to exercise. Concerning his death many romantic stories, some deifying him, others depreciatory, early came into circulation; the most probable account

is that having finally lost the popular favour, he died an exile in the Peloponnesus. Of the writings which bear his name, only the two didactic poems, the φυσικά and the καθαρμοί, can with certainty be ascribed to him; numerous fragments of both have been preserved.[1]

In his mystic theology, Empedocles is allied with the Orphic-Pythagorean doctrines; in his physics, on the other hand, he seeks a middle course between Parmenides (whose disciple he is called by Alcidamas, *ap.* Diog. viii. 56) and the theory of the universe which Parmenides opposed. With Parmenides, he denies that origin and decay in the strict sense are thinkable; but he cannot resolve on that account to oppose the plurality of things, their becoming and variability; and so, perhaps following the example of Leucippus, he adopts the expedient of reducing becoming to a combination, decay to a separation, and change to the partial separation and combination, of underived imperishable and invariable substances. These substances, however, he conceives as qualitatively distinct from each other, and quantitatively divisible; not as atoms, but as elements. He is the first philosopher who introduced this conception of elements; the term indeed is of later origin; Empedocles calls them the 'roots of all.' Also the fourfold number of the elements, fire, air, water, earth, originates with Empedocles. Neither of these four substances can pass over into another, or combine with another to form a third; all mixture of

[1] Collected and explained by Sturz, *Empedocles* (1805); Karsten, *Empedoclis Carm. Rel.* (1838); Stein, *Empedoclis Fragm.* (1852); Mullach, *Fragm. Phil.* i. 13 ff.

substances consists in small particles of them being mechanically assembled together; and the influence, which substantially separated bodies exert on each other, is brought about by small particles (*ἀπορρόαι*) of one becoming detached and entering into the pores of the other; where the pores and effluences of two bodies correspond to one another, they attract each other, as in the case of the magnet and iron. In order, however, that the substances may come together or separate, moving forces must also be present, and of these there must be two—a combining and a separating force. Empedocles calls the former Love (*φιλότης, στοργή*), or also Harmony, and the latter Hate (*νεῖκος, κότος*).

But these forces do not always operate in the same manner. As Heracleitus represents the world as periodically coming forth from the primitive fire and again returning to it, so Empedocles says that the elements are in endless alternation, now brought together into unity by love, and now separated by hate. In the former of these conditions, as a perfect mingling of all substances, the world forms the globe-shaped sphere, which is described as a blessed god because all hate is banished from it. The opposite counterpart of this is the entire separation of the elements. Between these extremes lie those conditions of the world in which individual natures arise and decay. In the formation of the present world love first produced a whirling motion in the midst of the substances separated by hate, and these were gradually drawn into it; from this mixture, through the rotatory movement, air or æther first separated itself, and thence was formed the

arch of the heavens; next fire, which occupied the place immediately below the æther; from the earth water was pressed out by the force of the rotation, and from the evaporation of the water came once more air, *i.e.* the lower atmosphere. The sky consists of two halves, one of fire, the other dark, with masses of fire sprinkled in it; the former is the heaven of the day-time, the latter of the night. The sun, Empedocles, like the Pythagoreans, held to be a mirror which collects and throws back the rays of the heavenly fire, as the moon those of the sun. The swiftness of the rotation occasions the earth and the whole universe to remain in their place.

From the earth, according to Empedocles, plants and animals were produced; but as the union of substances by love only came about by degrees, so in the origination of living creatures he supposed that a gradual progress led to more perfect results. First separate masses were thrown up from the earth, then these united together as it chanced and produced strange and monstrous forms; similarly when the present animals and human beings arose, they were at first shapeless lumps which only received their organism in course of time. That Empedocles, on the contrary, explained the construction of organisms according to design by the theory, that of the creations of chance only those capable of life maintained themselves, is neither probable in itself, nor is it asserted by Aristotle ('Phys.' ii. 8).[1] He seems to have occupied him-

[1] See my treatise, *Ueber die griechischen Vorgänger Darwin's*, Philol. und Hist. Abh. der Berl. Akad. 1878, s. 115 ff.

self considerably with the subject of living creatures. Concerning their generation and development, the elementary composition of the bones and flesh, the process of breathing (which is effected partly through the skin) and similar phenomena, he set up conjectures which were of their kind very ingenious. He tried to explain the activities of the senses by his doctrine of the pores and effluences: in regard to sight, he thought that emanations from the fire and water of the eye meet the light coming towards the eye. To explain the activity of thought, he brought forward the general principle that each element is recognised by the similar element in us[1] (as also desire is evoked by what is akin and aversion by what is opposed), and that therefore the quality of thought is regulated according to the constitution of the body and especially of the blood, which is the chief seat of thought. This materialism, however, does not deter him any more than Parmenides from placing sensible decidedly below rational knowledge.

With this system of natural philosophy Empedocles made no attempt to reconcile scientifically his mystic doctrine (allied to that of the Orphics and Pythagoreans) of the sinking down of souls into terrestrial existence, of their transmigration into the bodies of plants, animals, and men, and of the subsequent return of the purified souls to the gods; nor his prohibition of animal sacrifices and of animal food. He did not even try to explain away the contradiction between them, though it is evident that these doctrines

[1] γαίῃ μὲν γὰρ γαῖαν ὀπώπαμεν, &c. *Fragm.* ed. Mull. v. 378.

involve the conception that strife and opposition are the cause of all evil, and that unity and harmony are supremely blessed. Nor do we know whether and where room was left in the physics of Empedocles for the golden age to which a fragment (v. 417 M.) refers; and if the philosophic poet (v. 389) has, like Xenophanes, set up a purer idea of God in opposition to the anthropomorphic presentation of divinities, it is equally hard to say where this idea could have found a place in his physical system or even how it could have been compatible with it.

§ 24. *The Atomistic School.*

The founder of the atomistic school was Leucippus, a contemporary of Anaxagoras and Empedocles, which is the nearest approximation we can make to his date. Theophrastus (*ap.* Simpl. 'Phys.' 28. 4) calls him a disciple of Parmenides, but does not know whether he came from Miletus or Elea. The writings from which Aristotle and Theophrastus took their accounts of his doctrines seem to have been subsequently found among those of Democritus.[1] This renowned philosopher and student of nature, a citizen of Abdera, was, according to his own assertion (Diog. ix. 41), still young when Anaxagoras was already old (*νέος κατὰ πρεσβύτην Ἀναξαγόραν*); but that he was exactly forty years younger than Anaxagoras, and therefore born about

[1] Hence we can explain why Epicurus denied the existence of Leucippus (Diog. x. 13). When, however, Rohde (*Ueber Leucipp und Democrit*, Verhandlungen der 34. Philologenversammlung, 1881. *Jahrb. f. Phil.* 1882, s. 741 ff.) attempts to prove that Epicurus was right, he is amply confuted by Diels (Verhandl. der 35. Philologenvers. s. 96 ff.).

460 B.C., seems to be an unfounded assumption of Apollodorus. Aristotle ('Part. An.' i. 1, 642 a. 26; 'Metaph.' xiii. 4, 1078 b. 17) places him as a philosopher before Socrates. His passion for knowledge led him to Egypt and probably also to Babylonia, but whether his intercourse with Leucippus, whose disciple he was according to Aristotle and Theophrastus, is to be included in the five years he spent abroad ('Fr.' v. 6 Mull.) we do not know. He was acquainted also with other older and contemporary philosophers besides Leucippus, being himself the first of the *savants* and natural philosophers of his time. The year of his death is unknown; his age is variously given as ninety years, a hundred, and even more. Of his writings numerous fragments [1] have been preserved, but it is difficult, especially in regard to the moral sayings, to discriminate what is spurious.

The Atomistic theory, in its essential constituents, is to be regarded as the work of Leucippus, while its application to all parts of natural science appears to have been chiefly that of his disciple. Leucippus (as Aristotle says, 'Gen. et Corr.' i. 8) was convinced, like Parmenides, of the impossibility of an *absolute* genesis and decay; but he would not deny the plurality of things, motion, nor genesis and decay (*i.e.* of composite things); and since this, as Parmenides had shown, cannot be conceived without Non-Being, he maintained that Non-Being exists as well as Being. But Being (as in Parmenides) is that which fills space, the

[1] Collected by Mullach, *Democr. Fragm.* 1843; *Fragm. Phil.* i. 330 ff.

Full; Non-Being is the Void. Leucippus and Democritus, therefore, declared the Plenum and the Void to be the primary constituents of all things; but, in order to be able to explain phenomena in reference to them, they conceived the Plenum as divided into innumerable atoms, which on account of their minuteness are not perceptible separately; these are separated from one another by the Void, but must themselves be indivisible because they completely fill their space and have no vacuum in them; for this reason they are called atoms (ἄτομα) or also, 'thick bodies' (νασταί). These atoms are constituted precisely like the Being of Parmenides, if we imagine this as split up into innumerable parts and placed in an unlimited empty space; underived, imperishable, homogeneous throughout as to their substance, they are distinct from one another only by their form and magnitude, and are capable of no qualitative change but only of change of place. To them alone, therefore, we must refer the qualities and changes of things. As all atoms consist of the same matter, their weight must exactly correspond with their size; consequently, if two compound bodies of similar magnitude have a different weight, the reason can only be that there are more empty spaces in the one than in the other. All derivation, or genesis, of the composite consists in the coming together of separate atoms; and all decay in the separation of combined atoms; and similarly with all kinds of change. All operation of things on each other is a mechanical operation, through pressure and impact; all influence from a distance (as between the magnet and iron, light and

the eye) is effected by effluences. All properties of things depend upon the form, magnitude, position, and arrangement of their atoms; the sensible qualities which we ascribe to them merely express the manner in which they affect our senses: *νόμῳ γλυκύ, νόμῳ πικρόν, νόμῳ θερμόν, νόμῳ ψυχρόν, νόμῳ χροιή, ἐτεῇ δὲ ἄτομα καὶ κενόν.* (Dem. 'Fr. Phys.' 1.)

On account of their weight, all the atoms from eternity move downwards in infinite space; but, according to the atomists, the larger and therefore heavier atoms fall more quickly than the smaller and lighter, and strike against them; thus the smaller are impelled upwards, and from the collision of these two motions, from the concussion and rebound of the atoms, a whirling movement is produced. In consequence of this, on the one hand the homogeneous atoms are brought together, and on the other, through the entanglement of variously shaped atoms, complexes of atoms, or worlds, segregated and externally sundered, are formed. As motion has no beginning, and the mass of atoms and of empty space has no limits, there must always have been innumerable multitudes of such worlds existing under the most various conditions, and having the most various forms. Of these innumerable worlds our world is one. The conjectures of Democritus concerning its origin, the formation of the heavenly bodies in the air, their gradual drying up and ignition, &c., are in harmony with his general presuppositions. The earth is supposed by Leucippus and Democritus to be a round plate, floating on the air. The heavenly bodies, of which the two largest, the sun and moon, only

entered our universe after the earth had begun to be formed, before the inclination of the earth's axis, revolved laterally around the earth. In regard to the four elements, Democritus thought that fire consists of small smooth and round atoms, while in the other elements various kinds of atoms are intermingled.

Organic beings came forth from the terrestrial slime, and to these Democritus seems to have devoted special attention. He was, however, chiefly occupied with man; and though the structure of the human body is an object of the highest admiration to him, he ascribes still greater value to the soul and spiritual life. The soul, indeed, he can only explain as something corporeal: it consists of fine smooth and round atoms, and therefore of fire which is distributed through the whole body, and by the process of inhalation is hindered from escaping and is also replenished from the outer air; but the particular activities of the soul have their seat in particular organs. After death, the soul-atoms are scattered. Nevertheless, the soul is the noblest and divinest element in man, and in all other things there is as much soul and reason as there is warm matter in them: of the air, for example, Democritus said that there must be much reason and soul (*νοῦς* and *ψυχή*) in it, otherwise we could not receive them into us through the breath (Arist. 'De Respir.' 4). Perception consists in the change which is produced in the soul by the effluences going forth from things and entering through the organs of the senses; for example, the cause of sight is that the images (*εἴδωλα, δείκελα*) flying off from objects give

their shape to the intervening air, and this comes in contact with the effluences from our eyes. Each particular kind of atom is perceived by the corresponding kind in us. Thought also consists in a similar change of the body of the soul: it is true, when the soul has attained the proper temperature through the movements it experiences. This materialism, however, does not prevent Democritus, like other philosophers, from discriminating sharply between perception and thought (*γνώμη σκοτίη* and *γνησίη*) in respect of their relative value; and only expecting information concerning the true constitution of things from the latter; though at the same time he admits that our knowledge of things must begin with observation. It is also, no doubt, the imperfection of the sensible knowledge which occasions the complaints of Democritus as to the uncertainty and limitations of our knowledge; but he is not therefore to be considered a sceptic, for he expressly opposed the scepticism of Protagoras. As the value of our knowledge is conditioned by elevation above the sensible, so likewise is the value of our life. That which is most desirable is to enjoy oneself as much, and to vex oneself as little, as possible; but '*εὐδαιμονία* and *κακοδαιμονία* of soul dwell not in gold nor in flocks and herds, but the soul is the dwelling of the dæmon.' Happiness essentially consists in cheerfulness and peace of mind (*εὐθυμίη*,[1] *εὐεστώ*, *ἁρμονίη*, and *ἀθαμβίη*) and these are most surely attained by

[1] Π. *ἐπιθυμίης* is the title of the treatise from which all or much of the ethical fragments of the philosopher seem to have been taken, so far as they are genuine. See Herzel in *Hermes*, xiv. 354–407.

moderation of the desires and symmetry of life (*συμμετρίη*). This is the spirit of the practical precepts of Democritus, which show abundant experience, subtle observation, and pure principles. He does not appear to have tried to combine them scientifically with his physical theory; and if the leading thought of his ethics lies essentially in the proposition that the happiness of man entirely depends upon his state of mind, there is no proof that he undertook to establish this proposition by general reflections, as Socrates did with his maxim: 'Virtue consists in Knowledge.' Aristotle consequently reckons Democritus, in spite of his moral sayings, among the Physicists, and makes scientific ethics begin with Socrates ('Metaph.' xiii. 4, 1078 b. 17; 'Part. An.' i. 2, 642 a. 26).

The theory of Democritus concerning the gods of the popular belief sounds strange to us, but in truth it is quite consistent with his explanation of nature. Though he found it impossible to share that belief as such, it nevertheless seemed to him necessary to explain it. For this purpose, while he did not discard the theory that extraordinary natural phenomena have occasioned their being attributed to the gods as their authors, or that certain universal conceptions are presented in the gods, another and more realistic explanation harmonised better with his sensualism. As the popular religion peopled the atmosphere with dæmons, so Democritus supposed that in the atmosphere were beings of a similar form to men, but far surpassing them in size and duration of existence, whose influences were sometimes beneficent, and sometimes

malign; the images (*vide sup.* p. 80) which emanate from them, and appear to men either in sleeping or waking, came to be regarded as gods. Democritus also attempted to give a naturalistic explanation of prophetic dreams, and the influence of the evil eye, by means of his doctrine of images and effluences; he likewise thought that natural indications of certain ~~advantages~~ incidents were to be deduced from the entrails of sacrificial animals.

The most important disciple of the school of Democritus is Metrodorus of Chios, who was instructed either by Democritus himself or by his scholar Nessus. While he agreed with Democritus in the main features of his doctrine, he diverged from him as to the details of his natural philosophy in many points, and drew from his sensualism sceptical inferences, by which, however, he can hardly have intended to deny the possibility of knowledge. Anaxarchus ὁ Εὐδαιμονικός, who accompanied Alexander, and was more meritorious in his death than in his life, is a disciple of Metrodorus or of his scholar Diogenes. With Metrodorus, perhaps, Nausiphanes is also to be connected, who introduced Epicurus to the doctrine of Democritus; but he is likewise said to have attended Pyrrho the Sceptic.

§ 25. *Anaxagoras.*

Anaxagoras of Clazomenæ, according to Apollodorus (*ap.* Diog. ii. 7, who probably follows Demetrius Phaler.), born in Ol. 70–1, or 500 B.C., devoted himself to science, to the neglect of his property, and distinguished himself greatly as a mathematician. Con-

cerning his teachers nothing is known; some moderns, without any sufficient ground, attempt to make him a disciple of Hermotimus of Clazomenæ, a far more ancient and mythical wonder-worker, into whose legends (according to Arist. 'Metaph.' 984 b. 18) Anaxagoras' doctrine of *νοῦς* was at an early time interpolated. In Athens, whither he migrated (according to Diogenes, ii. 7, about 464–2 B.C.), he came into close relations with Pericles; accused by enemies of that statesman of denying the gods of the State, he was forced to leave Athens (434–3 B.C.). He removed to Lampsacus, where he died in 428 B.C. (Apollodor. *ap.* Diog. ii. 7). From his treatise *περὶ φύσεως*, in the composition of which he seems to have been already acquainted with the doctrines of Empedocles and Leucippus, important fragments have been preserved.[1]

Anaxagoras agrees with these philosophers that genesis and decay in the strict sense are unthinkable, that all genesis consists merely in the combination, and all decay in the separation, of substances already existing.[2] But the motion through which the combination and separation of substances is brought about he knows not how to explain by matter as such; still less the well-ordered motion which has produced such a beautiful whole, and so full of design, as the world. This can only be the work of an essential nature, whose knowledge and power extends over all things,

[1] In Mullach, *Fragm.* i. 243 ff., explained by Schaubach, *Anax. Fragmenta*, 1827. Schorn, *Anax. et Diogenis Fragmenta*, 1829.

[2] *Frag.* 17 m. (Simpl. *Phys.* 163, 20). *τὸ δὲ γίνεσθαι καὶ ἀπόλλυσθαι οὐκ ὀρθῶς νομίζουσιν οἱ Ἕλληνες. οὐδὲν γὰρ χρῆμα γίνεται οὐδὲ ἀπόλλυται ἀλλ' ἀπὸ ἐόντων χρημάτων συμμίσγεταί τε καὶ διακρίνεται καὶ οὕτως ἂν ὀρθῶς καλοῖεν τό τε γίνεσθαι συμμίσγεσθαι καὶ τὸ ἀπόλλυσθαι διακρίνεσθαι.*

the work of a thinking, rational, and almighty essence, of mind or *νοῦς*; and this power and rationality can only belong to *νοῦς* if it be mixed with nothing else, and is therefore restrained by no other. The conception of mind as distinguished from matter thus forms the leading thought of Anaxagoras; and the most essential mark for characterising this distinction is that mind is altogether simple, and matter altogether compound. Mind is 'mixed with nothing,' 'for itself alone' (*μοῦνος ἐφ' ἑωυτοῦ*), 'the rarest and purest of all things;' in these expressions its incorporeality is not indeed adequately described, but yet is unmistakably intended, while the question of its personality is still altogether untouched by the philosopher. Its operation essentially consists in the separation of the mixed, and to this separation its knowledge also may be reduced, as a discrimination. Matter, on the contrary, before mind has worked upon it, presents a mass in which nothing is sundered from another. But as all things arise out of this mass through mere separation of their constituents, it must not be conceived as a homogeneous mass, nor as a mixture of such simple primitive substances as the elements of Empedocles, or the atoms; according to Anaxagoras it rather consists of a medley of innumerable, underived, imperishable, unchangeable, invisibly small, but yet not indivisible corpuscles of specific quality; particles of gold, flesh, bones, &c. Anaxagoras describes these his primitive substances as *σπέρματα* or *χρήματα*; later writers call them, in half-Aristotelian terminology, *ὁμοιομερῆ*.

In harmony with these presuppositions Anaxagoras began his cosmogony with a description of the state in which all substances were entirely mingled together ('Fr.' 1 : ὁμοῦ πάντα χρήματα ἦν). Mind effected their separation by producing a whirling motion at one point, which spreading from thence drew in more and more particles of the infinite mass, and will continue to do so. That Anaxagoras supposed mind to interfere at other stages of the formation of the universe is not stated; Plato ('Phædo,' 97 B ff.) and Aristotle ('Metaph.' i. 4, 985 a. 18; 7, 988 b. 6), on the other hand, both censure him for not having applied his newly discovered principle to a teleological explanation of nature, and for confining himself like his predecessors to blindly working material causes. Through the whirling motion, the substances drawn into it are divided into two masses, of which one comprehends the warm, the dry, the light, and the thin; the other the cold, the moist, the dark, and the dense; these are the æther and the air, or more precisely, vapour, fog, ἀήρ. The division of substances proceeds with the continued movement, but never comes to an end; substances are in all parts of all things, and only on this account is it possible that a thing becomes changed by the emergence of substances; if snow were not black—that is, if darkness were not in it as well as brightness—it could not be changed into water. The rare and the warm were carried by the rotation towards the circumference, the dense and the moist into the centre; the earth is formed from the latter, and Anaxagoras, like the older Ionians, conceives it as a flat plate borne upon the air.

The heavenly bodies consist of masses of stone, which are torn from the earth by the force of the rotation, and hurled into the air, where they become ignited. These at first moved horizontally, and subsequently, from the inclination of the earth's axis, around, and at one part of their course, under the earth. The moon, Anaxagoras thought, was like the earth and inhabited; the sun, which is many times larger than the Peloponnesus, gave the greater part of their light to the moon and all the other stars. Through the solar heat, the earth, which at first was composed of slime and mud, in course of time dried up.

From the terrestrial slime which fructified the germs contained in the air and in the æther, living creatures were produced. That which animates them is mind, and this is the same in all things, including plants, but is apportioned to them in different measure. In man, even sensible perception is the work of mind, but it is effected by means of the bodily organs (in which it is called forth not by the homogeneous but by the opposite), and is therefore inadequate. Reason alone guarantees true knowledge. How entirely Anaxagoras himself lived for his inquiries, we know from some of his apophthegms; and some further utterances of his which are related reveal a noble and earnest view of life. That he occupied himself with ethics in a scientific manner, tradition does not assert; and not one religious philosophical maxim is known to have emanated from him. Personally he maintains towards the popular religion an attitude of full scientific freedom, and sought to give a naturalistic

explanation of reputed miracles, such as the meteoric stone of Ægospotamos.

Of the pupils of Anaxagoras, among whom may be reckoned Euripides, Metrodorus of Lampsacus is only known by his allegorical interpretation of the Homeric mythology. We have a little more information about Archelaus of Athens, the supposed teacher of Socrates. Though agreeing with Anaxagoras in other points, this physicist approaches more nearly to Anaximenes and Diogenes in that he named the original mass of matter air, represented spirit as mingled in air, and termed the separation of materials rarefaction and condensation. The masses which were first separated in this manner he called the warm and cold. The statement that he derived the distinction of good and bad from custom only (Diog. ii. 16) appears to be due to a mistake. As he is never mentioned by Aristotle, it is probable that he was not of much scientific importance.

III. The Sophists.

§ 26. *Origin and Character of Sophisticism.*

From the beginning of the fifth century, there began to prevail among the Greeks certain views the dissemination of which after some decades wrought an important change in the manner of thought of the cultured circles and in the tendency of scientific life. Already the conflict of philosophic theories, and the boldness with which they opposed the ordinary mode of presentation, tended to excite mistrust against these attempts at a scientific explanation of the world.

Further, since a Parmenides and a Heracleitus, an Empedocles and a Democritus had disputed the truth of sensible perception, more general doubt in the capacity of man for knowledge might the more easily be connected therewith, because the materialism of these philosophers furnished them with no means of establishing scientifically the higher truth of rational knowledge; and even Anaxagoras did not employ his doctrine of *νοῦς* for this purpose. Still more imperatively, however, did the general development of Greek national life demand a change in the direction of scientific activity. The greater and more rapid was the progress of universal culture since the Persian War in the whole of Hellas, and above all in Athens, which was now the centre of its intellectual and political life, the more did the necessity of a special preparation for political activity assert itself in regard to those who desired to distinguish themselves; the more completely victorious democracy gradually set aside all the limits which custom and law had hitherto placed to the will of the sovereign people, and the more brilliant the prospects thus opened to anyone who could win over the people to himself, the more valuable and indispensable must have appeared the instruction, by means of which a man could become an orator and popular leader. This necessity was met by the persons called by their contemporaries wise men or Sophists (*σοφοί, σοφισταί*), and announced by themselves as such; they offered their instruction to all who desired to learn, wandering, as a rule, from city to city, and requiring in return a proportionately high remunera-

tion; a practice for which in itself they are not to be blamed, but which hitherto had not been customary. This instruction might include all possible arts and knowledge, and we find that men who were counted among the Sophists, even some of the most important among them, taught quite mechanical arts. But the principal object of Sophistic instruction was the preparation for practical life, and since the time of Plato it has been usual to call those persons Sophists, in the narrower sense of the word, who came forward as professional teachers of 'virtue' (using the term in the comprehensive meaning of the Greek *ἀρετή*); who undertook to make their pupils adepts in action and speech (*δεινοὺς πράττειν καὶ λέγειν*), and to qualify them for the management of a household or community. This limitation to practical objects rests among them all upon the conviction—which was expressed by the most eminent Sophists in the form of sceptical theories, and by the majority was put in practice in their 'eristic'—that objectively true science is impossible, and that our knowledge cannot pass beyond subjective phenomena. This view could not be without a reflex action upon ethics; and the natural result was that the rebellion against all rule, civil, moral, or legal, which grew up in the feuds and factions of the period, found in Sophistic theories a superficial justification. Thus the so-called Sophists came forward as the most eminent exponents and agents in the Greek illumination (Aufklärung) of the fifth century, and they share all the advantages and all the weaknesses of this position. The current condemnation of the

Sophists, which is dominated by Plato's view of them, has been opposed by Hegel, K. F. Hermann, Grote, and others, who have brought to light their historical importance. Grote has even failed to notice the superficial, unsound, and dangerous element which from the first was united with anything that was justifiable and meritorious in them, and in the course of time came more and more to the surface.

§ 27. *Eminent Sophistical Teachers.*

The first man who called himself a Sophist and came forward publicly as a teacher of virtue (*παιδεύσεως καὶ ἀρετῆς διδάσκαλος*), was, according to Plato, Protagoras of Abdera (Plato, 'Protag.' 316 D f.; 349 A). Born about 480 B.C. or a little earlier, he wandered through Hellas for forty years, devoting himself with brilliant success to his work as a teacher. On several occasions he resided at Athens under the protection of Pericles, but at length he was accused of atheism, and compelled to leave the city. On his voyage to Sicily he was drowned, in the seventieth year of his age. Of his writings only a few fragments remain. Contemporary with Protagoras was Gorgias of Leontini, born 490–480 B.C., who first came forward as a teacher in Sicily, but after 427 frequented Athens and other cities of Central Greece. Afterwards he settled at Larissa in Thessaly, where he died, more than a hundred years old. In his later life he desired to confine his instructions to rhetoric, but we are acquainted with certain ethical definitions and sceptical arguments which he embodied in a separate treatise (apparently

in his youth). Somewhat later than Protagoras and Gorgias are the two contemporaries of Socrates, Prodicus of Iulis in Ceos, who enjoyed considerable reputation in the neighbouring city of Athens, and Hippias of Elis, who poured out his mathematical, physical, historical, and technical information with vainglorious superficiality (according to his opponents). Xeniades of Corinth appears to have lived about the same time, a Sophist who, according to Sextus, 'Math.' vii. 53, was mentioned by Democritus. Of the remaining the best known are: Thrasymachus of Chalcedon, a rhetorician whose character has been unfavourably portrayed by Plato; the brothers Euthydemus and Dionysodorus of Chios, the comic heroes of the Platonic 'Euthydemus;' the rhetorician, moralist, and poet, Evenus of Paros; the rhetoricians of the school of Gorgias, Polus, Lycophron, Protarchus, Alcidamas. Critias the leader of the Thirty, like Callicles in the Platonic 'Gorgias,' was not a Sophist in the technical sense, but a pupil of the school.

§ 28. *The Sophistical Scepticism and Eristic.*

Even as early as Protagoras the altered position of thought to its object was expressed in the proposition: 'Man is the measure of all things; of what is, how it is; of what is not, how it is not;'[1] *i.e.* for every person that is true and real which appears so to him, and for

[1] *Fr.* i. Mull. (*Fragm. Phil.* ii. 130); in Plato, *Theæt.* 152 A, 160 C, *et sæpe*; Sext. *Math.* vii. 60; Diog. ix. 51, &c. *πάντων χρημάτων μέτρον ἄνθρωπος, τῶν μὲν ὄντων ὡς ἔστι, τῶν δ' οὐκ ὄντων, ὡς οὐκ ἔστι.*

this reason there is only a subjective and relative, not an objective and universal truth. In order to establish this principle, Protagoras (according to Plato, 'Theæt.' 152 A ff.; Sext. 'Pyrrh.' i. 216 ff.), not only availed himself of the fact that the same thing makes an entirely different impression on different persons, but also of Heracleitus's doctrine of the flux of all things. In the constant change of objects and of the organs of sense each perception has a value only for a definite person and a definite moment, and therefore it is impossible to maintain one thing rather than another of any object.[1] Gorgias, on the other hand, in his treatise 'On the Non-being or Nature,'[2] made Zeno's dialectic his pattern, and also availed himself of propositions of Zeno and Melissus in order to prove, as he did with a certain acuteness, (1) that nothing could exist; (2) that what did exist could not be known by us; (3) and that which was known could not be imparted to another. In the school of Gorgias we meet with the assertion that no predicate can be given to a subject, because one thing cannot be many. The proposition of Protagoras also lies at the base of the principle of Xeniades, who maintained that all the opinions of men were false; and the apparently opposite principle of Euthydemus, that everything applied to anything at any time and at the same time. If the last-mentioned Sophist deduces from the

[1] Plut. *Adv. Col.* 4. 2. Democritus controverted the principle of Protagoras, *μὴ μᾶλλον εἶναι τοῖον ἢ τοῖον τῶν πραγμάτων ἕκαστον.*

[2] The contents of which we know from Sextus, *Math.* vii. 65–87. Ps. Arist. *De Melisso*, c. 5 f. Cf. Isocr. *Hel.* 2 f.

Eleatic presuppositions the inference that a man can neither utter nor think what does not exist and is therefore false; the same result appears in connection with Heracleitean and Protagorean doctrines; and the kindred proposition, that a man cannot contradict himself, is found even in Protagoras himself. But the practical procedure of the majority of the Sophists shows even more clearly than these sceptical theories how deeply rooted was the despair of objective knowledge in the whole character of this mode of thought. Independent inquiries in the physical part of philosophy are not known to have been undertaken by any of the Sophists, although they occasionally made use of certain assumptions of the Physicists, and Hippias extended his instructions even to mathematics and natural science. The more common, on the other hand, is the art of disputation or eristic, which seeks its object and triumph not in gaining a scientific conviction, but merely in contradicting and confusing those who take a part in the dialogue. To Plato, Aristotle, and Isocrates, an 'Eristic' and a 'Sophist' are almost synonymous titles. Even Protagoras maintained that any proposition could be supported or confuted with good reasons. In his conversation and in his writings he introduced pupils to this art, and his fellow-countryman Democritus laments ('Fr. Mor.' 145) over the 'wranglers and strap-plaiters' of his day. Subsequently we find the theory and practice of this art in an equally melancholy condition. According to Aristotle ('Top.' ix. 33, 183 b. 15), the theory consisted in making pupils learn the most common

'catches' by heart. The practice is seen in the Platonic 'Euthydemus,' degraded to empty repartee, and even to formal badinage; and that this picture, which does not conceal its satiric nature, is not a mere caricature is shown by Aristotle's treatment of fallacies ('Top.' ix.), in which the examples are almost entirely borrowed from the Sophists of the Socratean period, from whom also the Megarian Eristics took their patterns. It is true that the pitiful trivialities of a Dionysodorus and Euthydemus are not attributed to Protagoras and Gorgias; but we cannot fail to recognise one as the direct descendant of the other. If, nevertheless, this Eristic was able to bring most disputants into difficulties and excite admiration among many; if even Aristotle thought it worth serious examination, this is only a proof how little practised in thinking the men of that time were, and what difficulties could be thrown in the way of their training by the confusions which can hardly be avoided when thought, as yet unacquainted with the conditions necessary to correctness of method, becomes for the first time aware of the full extent of its power.

§ 29. *The Sophistic Ethics and Rhetoric.*

If there is no universally valid truth, there cannot be any universally valid law; that is true for every man which appears to him to be true, that must be right of which he approves. The older Sophists did not deduce these consequences from their presuppositions. If they came forward as teachers of virtue, they understood by virtue what was universally meant by the word at the

time. The 'Heracles' and other moral lectures of Prodicus, the counsels which Hippias put into the mouth of Nestor, would never have received the approval which they did had they been at variance with the moral views of the time. In the myth in Plato ('Prot.' 320 C ff.), which, no doubt, is taken from him, Protagoras regards the sense of justice and duty (δίκη and αἰδώς) as a gift of the gods vouchsafed to all men; he therefore recognises a natural justice. Gorgias described the virtue of the man, of the woman, of the child, of the slave, &c., as they were popularly conceived (Plato, 'Meno,' 71 D f.; Arist. 'Pol.' i. 13, 1260 a. 27). Yet even in the Sophists of the first generation some of the practical consequences of their scepticism come to the surface. Protagoras very properly met with opposition when, by promising to make the weaker cause appear the stronger (τὸν ἥττω λόγον κρείττω ποιεῖν), he recommended his rhetoric precisely on the side where it was open to abuse. Hippias (Xen. 'Memor.' iv. 4. 14 ff.) places law in opposition to nature, in a contrast of which he himself makes very doubtful applications, and which at a later time became one of the leading thoughts of the Sophistic art of life. Plato puts into the mouth of Thrasymachus, Polus, and Callicles the view which Aristotle also shows to have been widely maintained in Sophistic circles ('Top.' ix. 12, 173 a. 7), that natural right was the right of the stronger, and all positive laws were merely capricious enactments, which the authorities of the time had made in their own interest. If justice was generally commended this merely arose from the fact that the mass of men found it to their advantage. On

the other hand, anyone who felt that he had the power to rise above these laws had the right to do so. That the distinction between law and nature was also used to set men free from national prejudices is shown by the doubts to which it gave rise whether slavery was according to nature—doubts which Aristotle mentions, 'Pol.' i. 3, 6.

Among human ordinances were to be reckoned the belief in and worship of gods; of this the variety of religions is a proof. 'Of the gods,' wrote Protagoras, 'I have nothing to say; either that they exist or that they do not exist.' Prodicus saw in the gods personifications of the heavenly bodies, the elements, the fruits of the earth, and, generally, of all things useful to men. In the 'Sisyphus' of Critias the belief in gods is explained as the discovery of a politician who employed it as a means to terrify men from evil.

The more completely the human will freed itself from the limitations which religion, custom and law had hitherto drawn around it, the higher rose the value of the means by which men could win for themselves this sovereign will and make it their subject. With the Sophists all these means were included in the art of speech, the power of which, it is true, was quite extraordinary at that time, and was altogether overestimated by those who owed their whole influence to it. Hence of the great majority of the Sophists it is expressly handed down that they came forward as teachers of elocution, composed introductions to the art, pronounced and wrote pattern speeches, which they caused their pupils to learn by heart. It was a neces-

sary concomitant of the whole character of the Sophistical instruction that greater weight should be laid on the technicalities of language and exposition than on the logical or actual correctness of the discussion. The speeches of the Sophists were exhibitions which attempted to create an effect mainly by a clever choice of subject, by startling turns in the treatment, copiousness of expression, select, delicate, and exuberant language. Gorgias more especially owed to these peculiarities the brilliant success of his speeches, though it is true that to a riper taste, even in antiquity, they seemed over-elaborate and insipid. Yet many of these Sophistical rhetoricians, as for instance Thrasymachus, did real service in the cultivation of the art of oratory and its technicalities. From them also proceeded the first investigations into the science of language. Protagoras, for the first time, no doubt, distinguished the three genders of nouns, the tenses of verbs, and the kinds of sentences. Hippias laid down rules on metre and euphony, and Prodicus by his distinction between synonymous words, though he doubtless ascribed an undue value to it, gave a great impulse to lexicographical inquiries and the formation of a scientific terminology.

SECOND PERIOD.

SOCRATES, PLATO, ARISTOTLE.

§ 30. *Introduction.*

It was inevitable that the illumination of the Sophistic period should have a double effect upon scientific life. On the one hand, thought, in the consciousness of its power, demanded obedience from all authority. In the questions of the theory of knowledge and of ethics a new field of inquiry, hitherto only incidentally touched upon, was opened, and this inquiry received varied exercise in the Sophistic dialectic. On the other hand, the investigations of the Sophists had merely ended in the conclusion that a scientific foundation of ethics was as utterly hopeless as a scientific knowledge of the world; and with the surrender of the belief in man's power of knowledge must be given up also the effort after the knowledge of truth. As the existing basis of moral conviction—the absolute supremacy of human and divine laws—was also abandoned, the moral and civic life of the Greeks appeared to be in no less danger than the scientific life. As a fact, this alarm was not yet well grounded. From the beginning of the fifth century the moral and religious intuitions of the nation had undergone such a refinement and amplification by the poets and writers of the time, the questions which were of the first importance for human life had been so

variously discussed, though not in a scientific form, that nothing was needed beyond a deeper reflection on the part of the Greek mind upon itself and the gains already won, in order to acquire a new and firm foundation for moral action. But this reflection could only be the work of a science which was free from the doubts by which the confidence in the science of the day had been destroyed. In opposition to the dogmatism of such science, it must proceed from firm principles about the problem and conditions of knowledge. In opposition to the sensuous view, from which the physicists had never been able to emancipate themselves, it must recognise as the true object of science the nature of things as comprehended by thought, and passing beyond immediate perception. This new form of the scientific life Socrates founded by demanding knowledge through concepts, by introducing men to the formation of concepts by dialectic, and by applying the process to ethical and kindred religious questions. In the smaller Socratic schools separate elements of his philosophy were retained in a one-sided manner, and in an equally one-sided manner connected with older doctrines. Plato carried on the work of his master with a deeper and more comprehensive intelligence. He developed the Socratic philosophy of concepts, which he supplemented by all the kindred elements of pre-Socratic doctrines, to its metaphysical consequences, and regarded everything from this point of view. In this manner he created a grand system of an idealistic nature, the central point of which lies on the one side in the intuition of ideas, on the other in inquiries

about the nature and duty of man. Aristotle supplemented this by the most vigorous researches into nature. While controverting the dualistic harshness of the Platonic idealism, he held closely to the leading principles, and by extending them so widely that they seemed adapted to embrace the entire world of reality, he brought the Socratic philosophy of concepts to the highest scientific completeness.

I. Socrates.

§ 31. *Life and Personality of Socrates.*

Socrates was born in 470 B.C. (it is said on the sixth of Thargelion), or, at latest, in the first months of the following year.[1] His father, Sophroniscus, was a sculptor; his mother, Phænarete, a midwife. In youth his education does not seem to have gone beyond the limits common in his country. Anaxagoras is mentioned as his teacher by later writers only; and Archelaus by Aristoxenus—not by Ion of Chios, his contemporary (Diog. Laert. ii. 19. 23. 45, &c.). The absolute silence of Plato and Xenophon are against both these assumptions, as also are expressions which Plato puts into the mouth of Socrates in 'Phædo,' 97 B; 'Crito,' 52 B; and Xenophon, 'Mem.' iv. 7. 6 f.; 'Symp.' i. 1. 5. At a later time he may have sought to increase his knowledge from books, mixed with the Sophists, and attended some of their lectures; but he owed his philosophy rather to

[1] This is clear from the statements about the time of his death and condemnation (Diog. ii. 44; Diodor. xiv. 37; Xen. *Memor.* iv. 8, 2; Plato, *Phæd.* 59 D) and about his age at the time (Plato, *Apol.* 17 D; *Crito*, 52 E).

his own reflection, and to the means of culture which Athens then provided—to conversation with leading men and women—than to direct scientific instruction. He appears to have learnt his father's art; but his higher mission of influencing the development of others was made known to him by the inward voice which he himself regarded as divine (Plato, 'Apol.' 33 C), and this voice was at a later time confirmed by the Delphic oracle. Aristophanes represents him as thus engaged in 424 B.C., and Plato even before the beginning of the Peloponnesian war. He devoted himself to his work to the end, even under circumstances of the greatest poverty, and with Xanthippe at his side. His self-renunciation was complete. He asked for no reward; neither the care of his family nor participation in public business withdrew him from his mission. A pattern of a life of few needs, of moral purity, justice, and piety, yet at the same time full of genuine human kindliness, a pleasant companion, subtle and intellectual, of never-failing cheerfulness and calm, he became an object of enthusiastic veneration to men of the most varied character and rank. A son of his nation, he not only discharged his civic duties in peace and in the field unfalteringly, unshaken by any danger, but in his whole nature and conduct, as well as in his views, he shows himself a Greek and an Athenian. At the same time we can find in him traits which gave even to his contemporaries the impression of something strange and remarkable, of an unparalleled singularity (*ἀτοπία*). On the one hand there was a prosiness, an intellectual pedantry, an indifference to outward appearance,

which suited very well with the Silenus figure of the philosopher, but stood in sharp contrast to the susceptibility of Attic taste. On the other hand, there was an absorption in his own thoughts which at times gave the impression of absence of mind, and a power of emotion so potent that the dim feeling which even in his youth held him back when about to take this or that step appeared to him a dæmonic sign and an inward oracle. Even in dreams he believed that he received prophetic warnings. But the ultimate basis of all these traits lies in the devotion with which Socrates withdrew himself from the external world in order to give his undivided interest to the problems which arise out of the intellectual nature of man. The same character is stamped on his philosophy.

§ 32. *The Philosophy of Socrates.*

The Sources. Principle. Method.

As Socrates left no writings behind him, the only authentic sources of our knowledge of his teaching are the writings of his pupils Xenophon and Plato. Among later writers Aristotle alone can be taken into consideration, and he tells us nothing that cannot be found in Plato or Xenophon. But these two authors give us an essentially different picture of the Socratic philosophy; and if Plato places his own views without any deduction in the mouth of his master, we have to ask whether the unphilosophic Xenophon, in his 'Memorabilia'—the first object of which was apologetic—has given us the views of Socrates in their true

meaning without any abbreviation. But though this objection is not without ground, we have no reason to suspect the fidelity of Xenophon's account to the extent which Dissen [1] and Schleiermacher [2] have done. On the contrary, it is clear that the statements of Xenophon agree with those of Plato which bear an historical stamp, in all essential points; and if, with the help of Plato and Aristotle, we penetrate the meaning of the Socratic doctrine we can form from the accounts which Xenophon gives of his teaching and method a consistent picture which answers to the historical position and importance of the philosopher. Like the Sophists, Socrates ascribes no value to natural science, and would restrict philosophy to the questions which are concerned with the welfare of men. Like them also he demands that every one should form his convictions by his own reflection, independently of custom and tradition. But while the Sophists denied objective truth and universal laws, Socrates is on the contrary convinced that the value of our notions, the correctness of our actions, depends entirely upon their harmony with that which is true and just in itself. If, therefore, he restricts himself to practical questions, he makes correct action depend on correct thinking; his leading idea is the reform of moral life by true knowledge; science must not be the servant of action, but govern it, and fix its aims; and the need of science is so strongly felt by him that even in Xenophon's account he constantly oversteps the limits

[1] *De Philosophia morali in Xenoph. de Socr. comment. tradita*, Gott, 1812. (D.'s *Kl. Schr.* 57 ff.)

[2] *Ueber den Werth des Socr. als Philosophen* (1818): Werke, iii. 2, 293 ff.

which he has imposed upon himself, by dialectical inquiries which have no practical object. For Socrates, therefore, the principal question is: What are the conditions of knowledge? This question he answers with the proposition that no man can say anything upon any subject until he knows the concept of it—what it is in its general unalterable nature. All knowledge, therefore, must begin with fixing concepts. Hence for this philosopher the first thing necessary is the testing of his own notions in order to ascertain whether they agree with this idea of knowledge, the self-examination and self-knowledge which in his view were the beginning of all true knowledge, and the conditions of all right action. But inasmuch as the new idea of knowledge was indeed felt as a necessity, but not yet formulated in a scientific system, self-examination can only end in a confession of ignorance. Yet the belief in the possibility and the conviction of the necessity of knowledge are in Socrates far too vigorous to allow him to remain satisfied with the consciousness of ignorance. Rather they give rise to a more energetic search after knowledge, which here assumes shape in the fact that the philosopher turns to others in order with their assistance to gain the knowledge which is wanting in himself; it becomes inquiry in common by means of conversation. Inasmuch as other men believe that they have a knowledge of some kind or another, he has to inquire how the case stands with this supposed knowledge; his activity consists in the examination of men, in the 'proving of himself and the rest of the world' (*ἐξετάζειν ἑαυτὸν καὶ τοὺς ἄλλους*), which he states to be his

mission in the Platonic 'Apology' (28 E, 38 A), and the midwifery (*maieutikè*) of the 'Theætetus' (149 ff). But inasmuch as the true idea of knowledge is found to be absent in those whom he subjects to his tests, the examination only leads to the proof of their ignorance; and the request for instruction on the part of Socrates appears as simply 'irony.' On the other hand, so far as the partners in the conversation undertake to accompany him in the search for knowledge, and commit themselves to his guidance in the way which he has discovered— and this is especially the case with the young—younger men become with him the object of that inclination, which arises in any man marked out by nature to teach and educate, towards those who respond to his influence. Socrates is according to the Greek view a lover, though his love is not for a beautiful body but for a beautiful soul. The central point of the inquiries which Socrates carries on with his friends is always the fixing of concepts, and the method by which this object is attempted is induction by dialectics.[1] This induction does not begin with exact and exhaustive observation, but with well-known experiences of daily life, and propositions universally acknowledged. But as the philosopher looks at every object from all sides, tests every definition by contradictory instances, and constantly brings forward new cases, he compels thought to form such ideas as are adequate to the whole subject, and unite all the essential character-

[1] Arist. *Metaph.* xiii. 4, 1078 b. 27: δύο γάρ ἐστιν ἃ τις ἂν ἀποδοίη Σωκράτει δικαίως, τούς τ' ἐπακτικοὺς λόγους καὶ τὸ ὁρίζεσθαι καθόλου. *Ib.* i. 6, 987 b. 1. *Part. An.* i. 1, 642 a. 28, and elsewhere.

istics of the object in a manner beyond any contradiction. With Socrates the measure of truth lies in conceptions.[1] However different the means of which he avails himself to contradict the opinions of others, or to prove his own views, they always lead to the result, that that, and that only, ought to be asserted of anything which corresponds to its idea when rightly conceived. But Socrates never established any theory of logic or methodology, apart from the general principle that knowledge is through concepts.

§ 33. *The Nature of the Socratic Teaching.*

In contrast to the Physicists, Socrates confined himself to ethical inquiries. Only these have a value for men; and to them alone is his power of knowledge adequate. The speculations of natural philosophy, on the other hand, are not only unfruitful but objectless; nay, they are even mistakes, as is shown by the want of harmony among the professors of them, and the obvious difficulties into which they had brought even such a man as Anaxagoras. (Xen. 'Mem.' i. 1. 11 ff.; iv. 7. 6.) We have all the less reason to mistrust this statement, as Schleiermacher does, since Aristotle ('Metaph.' i. 6, 987 b. 1; xiii. 4, 1078 b. 17; 'Part. An.' i. 1, 642 a. 28) confirms it, and it agrees with the general attitude of Socrates. As we should expect from the general direction of his philosophy, the leading thought of the Socratic ethics consists in reducing virtue to

[1] Xenoph. *Mem.* iv. 6, 13: εἰ δέ τις αὐτῷ περί του ἀντιλέγοι . . . ἐπὶ τὴν ὑπόθεσιν (the general presupposition with which the decision has to begin) ἐπανῆγεν ἂν πάντα τὸν λόγον.

knowledge. According to Socrates it is not merely impossible to do right without knowledge; it is impossible not to do right if what is right is known. For as the good is nothing else than that which is most serviceable to the doer, and everyone desires his own good, so it is inconceivable in the opinion of Socrates that any one should not do that which he recognises as good. No one is voluntarily bad. In order, therefore, to make men virtuous it is only necessary to make quite clear to them what is good; virtue arises through instruction, and all virtues consist in knowledge. He is brave who knows how to conduct himself in danger; pious, who knows what is right towards the gods; just, who knows what is right towards men, &c. All virtues, therefore, are reduced to one—knowledge or wisdom; and even the moral basis and problem is the same in all men. But what the good is of which the knowledge makes men virtuous, Socrates finds it the more difficult to say, as he has no substructure for his ethics in anthropology and metaphysics. On the one hand (Xen. 'Mem.' iv. 4, 6), he explains that as just which agrees with the laws of the State and the unwritten laws of the gods; but on the other, and this is the more common and consistent view, he is at pains to point out the basis of moral laws in the success of actions which are in harmony with them, and their usefulness to men. For, as he says more than once (Xen. 'Mem.' iii. 8, 9. 4; iv. 6, 8. Plato, 'Prot.' 333 D, 353 C ff. &c.), that is good which is useful for men. Good and beautiful are therefore relative ideas. Everything is good and beautiful in reference to that for which it

is useful. In Plato and in Xenophon also (Plato, 'Apol.' 29 D f.; 'Crito,' 47 D f.; Xen. 'Mem.' i. 6, 9; iv. 8. 6, 2; 9. 5, 6) Socrates regards as unconditionally useful and necessary before all things the care for souls and their perfection; but his unsystematic treatment of ethical questions does not allow him to carry out this point of view strictly. Hence, in Xenophon at any rate, this deeper definition of an aim is frequently crossed by a eudæmonistic foundation of moral duties, which considers a regard to the consequences upon our external prosperity which follow from their fulfilment or neglect to be the sole motive of our conduct. It is true that the Socratic morality even where the scientific basis is unsatisfactory is in itself very noble and pure. Without any trace of asceticism Socrates insists, with great emphasis, that a man shall make himself independent by limitation of his needs, by moderation and endurance; and that he should ascribe greater importance to the cultivation of his mind than to all external goods. He demands justice and active benevolence towards others, commends friendship, and condemns pæderastia in the lower sense, though his conception of marriage does not rise above that usual among the Greeks. He recognises in full measure the importance of civic life; he considers it a duty for a man to take part in it according to his powers, and is at pains to form excellent citizens and officers for the State. He requires that unconditional obedience to the laws which he himself observed even to the death. But as knowledge alone qualifies for right action, he would only allow the right of political action to those

who have the requisite knowledge; these and these alone does he recognise as rulers. The election of officers by choice or lot he considers perverse, and regards the rule of the masses as ruinous. On the other hand, he has shaken off the Greek prejudice, and is opposed to the prevailing contempt of trade and labour. A confession of cosmopolitanism is placed in his mouth, but wrongly (Cicero, 'Tusc.' v. 37, 108 &c.), and Plato ascribes to him the principle that a man ought to do no evil to his enemy ('Rep.' i. 334 B ff.), thereby contradicting Xenophon, 'Mem.' ii. 6. 35.

Socrates considered our duties to the gods to be among those which are essential. This point of support his moral teaching cannot dispense with, and the less so because, as he was limited to ethics, he had not the means of proving the necessity of the connection between acts and their consequences on which moral laws are founded, and thus these laws present themselves to him in the customary way as 'the unwritten ordinances of the gods' ('Mem.' iv. 4. 19). But the thinker, whose first principle it is to examine everything, cannot rest in mere belief; he must take account of the grounds of this belief, and in attempting to do this he becomes, in spite of his radical aversion to all theoretical speculation, and almost against his will, the author of a view of nature and a theology which has exercised a leading influence even to the present time. But even here the guiding thought is the same as in his ethics. Man fashions his life aright when he refers all his actions to his own true benefit as a final object; and Socrates looks on the whole world in its

relation to this aim. He finds that everything in it, the smallest and the greatest, serves for the advantage of men ('Mem.' i. 4; iv. 3); and, though he works out this principle for the most part with a very superficial and unscientific teleology, he does not neglect to mark out the intellectual powers and prerogatives of men as the highest gifts which nature has vouchsafed to them. This arrangement of the world can only arise from the wisdom and beneficence of the creative reason, which we can nowhere seek but among the gods. In speaking of the gods Socrates thinks first of those of his own nation, but with him, as with the great poets of the fifth century, the plurality of the gods ends in a unity, and in the 'Memorabilia' (iv. 3. 13) he distinguishes the Creator and Ruler of the universe from the other gods, conceiving of him, after the analogy of the human soul, as the mind (*νοῦς*) dwelling in the world (i. 4, 9. 17 ff.). As the soul takes care for the body, so divine providence takes care for the world, and especially for men. Socrates finds a remarkable proof of this care in the various modes of prophecy. For the worship of the gods he lays down the principle that everyone should adhere to the custom of his city. As to the rest the value of an offering was of little importance compared with the spirit of him who offered it, and special blessings were not to be prayed for, since the gods knew best what is good for us. He had no doubt of the relationship of the human soul to the divine; on the other hand, he did not venture distinctly to maintain its immortality (Plato, 'Apol.' 40 C f.; cf. Xen. 'Cyrop.' viii. 7. 19 ff.).

§ 34. *The Death of Socrates.*

When Socrates had laboured in Athens for a complete generation the charge was brought against him by Meletus, Anytus, and Lyco that he denied the existence of the gods of the State, attempted to introduce new deities in their place, and corrupted the youth. Had he not despised the common method of defence before a court; had he made a few concessions to the usual claims of the judges, he would no doubt have been acquitted. When the sentence against him had been carried by a few votes[1] and the punishment was being discussed, he came forward before the court with unbroken pride, and the sentence of death which his accusers proposed was passed by a larger majority. He refused to escape out of prison as contrary to law, and drank the cup of hemlock with philosophic cheerfulness. That personal enmity played a part in his accusation and condemnation is probable, though it was not the enmity of the Sophists as some have supposed. Yet the deciding motive lay in the determination of the ruling democratic party to place a barrier upon the innovating Sophistical education, which was regarded as chiefly responsible for the disasters of the last decades, by punishing its leading representative. It was an attempt on the part of the democratic reaction to restore by violence the good old times. This attempt was not only a grievous outrage

[1] According to Plato, *Apol.* 36 A, it would not have been passed if only three, or, according to another reading, thirty of the five or six hundred heliasts had voted otherwise.

in the manner in which it was carried out—for in no respect had the philosopher laid himself open to legal punishment—but it rested upon a most dangerous deception. The old times could not be restored, least of all in this manner, and Socrates was by no means the cause of their disappearance. On the contrary, he had pointed out the only successful way of improving the present condition of affairs, by insisting on moral reform. Regarded from a legal and moral point of view, his execution was a judicial murder, and as an historical fact it was a gross anachronism. But just as Socrates might have escaped the sentence, in all probability, had he been less independent, so the sentence itself had precisely the opposite effect from that which his opponents wished. It is doubtless a later invention that the Athenian people cancelled the sentence by punishing the accusers, but history has all the more completely erased it. The death of Socrates was the greatest triumph of his cause, the brilliant culmination of his life, the apotheosis of philosophy and the philosopher.

II. The Smaller Socratic Schools.

§ 35. *The School of Socrates: Xenophon.*

Among the numerous persons who were attracted and retained by the marvellous personality of Socrates, the greater part had more feeling for his moral greatness and the ethical value of his speeches than for his scientific importance. We see from Xenophon (born about 430, and died about ninety years old) how the

Socratic philosophy was set forth in this respect, and how it was applied to human life. However worthy of respect he was for his practical wisdom, his piety, and nobility of feeling, however great his merits in preserving the Socratic teaching, his intelligence of its philosophic meaning was limited. In a similar manner Æschines seems to have set forth the doctrine of his master from its practical and common-sense side in his Socratic dialogues. Plato describes the two Thebans, Simmias and Cebes, pupils of Philolaus, as men of philosophic nature ('Phædr.' 242 B), but we know nothing further of either of them; even Panætius declared their works to be spurious, and the 'picture' of Cebes which has come down to us is certainly so. Besides Plato, we know of four pupils of Socrates who founded schools. Euclides, by combining Eleatic doctrines with Socratic, founded the Megarian school; Phædo founded the kindred Elean; Antisthenes the Cynic, under the influence of the Sophistic of Gorgias; and Aristippus the Cyrenaic, under the influence of Protagoras.

§ 36. *The Megarian and the Elean-Eretrian Schools.*

Euclides of Megara, the faithful follower of Socrates, had also become acquainted with the Eleatic teaching, perhaps before he met with the philosopher. After the death of Socrates he came forward in his paternal city as a teacher. He was succeeded by Ichthyas as leader of the school. A younger contemporary of the latter is Eubulides, the dialectician, a passionate opponent of Aristotle; a con-

temporary of Eubulides was Thrasymachus, while Pasicles came somewhat later. To the last thirty years and the end of the fourth century belong Diodorus Cronus (died 307 B.C.), and Stilpo of Megara (370–290 B.C.); younger contemporaries of Stilpo are Alexinus the Eristic, and Philo, the pupil of Diodorus. The starting-point of the Megarian doctrine was formed, according to Plato, 'Soph.' 246 B ff.—if Schleiermacher is right in referring that passage to this doctrine, as seems probable—by the Socratic teaching of concepts. If only knowledge by concepts has truth (so Euclides concludes with Plato), reality can only belong to that to which this knowledge is related, to the unchangeable essence of things, the *ἀσώματα εἴδη*. The world of bodies, on the other hand, which our senses exhibit to us, is not Being at all. Origin, decay, change, and motion are inconceivable, and therefore it was maintained apparently even by Euclides that only what was real was possible (Arist. 'Metaph.' ix. 3). But all Being leads us back in the last resort (as in 'Parmenides') to Being as a unity, and as Being was placed on an equality with the good, which is the highest concept of the Socratic ethics and theology, the Megarians arrived at the conclusion that there was only one good, unchangeable and unalterable, though known by different names, as Insight, Reason, Divinity, &c. In like manner there was only one virtue, the knowledge of this good, and the various virtues are but different names for this one. Everything beside the good was non-existent; and thus the plurality of 'incorporeal forms' which was at first presupposed was again given up. In order to establish

these views, the founders of the school, following the example of Zeno, availed themselves of indirect proof by the refutation of opponents; and their pupils pursued this dialectic with such eagerness that the whole school derived from them the name of the Dialectic or Eristic. Most of the applications which they made use of—the veiled man, the liar, the horned man, the sorites—are quite in the manner of the Sophists, and were for the most part treated in quite the same Eristic spirit as the Sophists treated them. We hear of four proofs of the impossibility of movement given by Diodorus, which are imitated from Zeno, and a demonstration of the Megarian doctrine of the possible, which was admired for centuries under the title of the *κυριεύων*.[1] When nevertheless he merely asserted that what is or can be is possible; that a thing may have been moved but nothing can move, it was a singular contradiction. Still further did Philo deviate from the strict teaching of his school. Stilpo, who had Diogenes the Cynic for his teacher as well as Thrasymachus, showed himself a pupil of the former by his ethical tendencies, by the apathy and self-sufficiency of the wise man which he inculcated in word and deed, by his free attitude to the national religion, and the assertion that no subject admits a predicate different from it. But in other respects he was faithful to the Megarian school. His pupil Zeno combined the Megarian and the Cynic schools into the Stoic.

[1] Cf. on this *Socrates and the Socratic Schools*, and on the *κυριεύων*, in particular, my treatise in the *Sitzungsber. d. Berl. Akad.* 1882, s. 151 ff.

The Elean school was closely related to the Megarian. It was founded by Phædo of Elis, the favourite of Socrates, with whom Plato has made us acquainted. Yet nothing further is known to us of his teaching. A pupil of the Eleans, Moschus and Anchipylus, was Menedemus of Eretria (352–278); even earlier he had attended Stilpo, in whose spirit he combined with the Megarian dialectics a view of life related to the Cynic, but at the same time going back to the Megarian doctrine of virtue. But the extent and continuance of this (Eretrian) school can only have been very limited.

§ 37. *The Cynic School.*

Antisthenes of Athens, the founder of the Cynic school, had enjoyed the instruction of Gorgias, and was himself active as a teacher before he had become acquainted with Socrates, to whom he henceforth attached himself with the greatest devotion. He appears to have been considerably older than Plato: according to Plutarch ('Lycurg.' 30 *end*), he survived the year 371 B.C. Of his numerous writings, which were distinguished for the excellence of their style, only a few fragments remain.[1] After the death of Socrates he opened a school in the gymnasium of Cynosarges, and partly from this place of meeting, partly from their mode of life, his adherents were known as Cynics. Among his immediate pupils we only know Diogenes of Sinope, the eccentric being of coarse humour and indomitable will, who, after his

[1] Collected by Winckelmann, *Antisth. Fragm.* 1842. Mullach, *Fr. Phil.* ii. 261 ff.

exile from home, lived generally at Athens and died at Corinth at a great age in 323 B.C. The most important of his pupils is Crates of Thebes, a cultivated man, whose mendicant life was shared in admiring affection by his wife Hipparchia. Among the last members of the school known to us are Menedemus and Menippus the satirist, both of whom belong to the second third of the third century. From this date the school appears to have been absorbed in the Stoic, from which it did not emerge again for 300 years.

What Antisthenes admired and imitated in Socrates was in the first instance the independence of his character. His scientific researches he considered of value only so far as they bore directly upon action. 'Virtue,' he said (Diog. vi. 11), 'was sufficient for happiness, and for virtue nothing was requisite but the strength of a Socrates; it was a matter of action, and did not require many words or much knowledge.' Hence he and his followers despised art and learning, mathematics and natural science; and if he followed Socrates in requiring definition by concepts, he applied the doctrine in a manner which made all actual knowledge impossible. In passionate contradiction to the Platonic ideas, he allowed the individual being only to exist, and hence demanded that everything should receive its own name (the οἰκεῖος λόγος) and no other. From this he deduced the conclusion (apparently after the pattern of Gorgias) that no subject can receive a predicate of a different nature. He rejected, therefore, definition by characteristic marks; only for what was composite would he allow an enumeration of its

constituent parts. What was simple might be explained by comparison with something else, but it could not be defined. With Protagoras he maintained that no man could contradict himself, for if he said what was different he was speaking of different things. Thus he gave a thoroughly Sophistic turn to the Socratic philosophy of concepts.

The result of this want of a scientific basis was seen in the simplicity of his ethics. The leading thought is expressed in the proposition that virtue only is a good, vice only is an evil; everything else being indifferent. That only can be good for a man which is proper to him (*οἰκεῖον*), and this can only be his intellectual possessions: all else, property, honour, freedom, health, life itself, are not in themselves goods; poverty, shame, slavery, sickness, death are not in themselves evils; least of all can pleasure be regarded as a good, or labour and work as an evil; for pleasure, when it becomes a man's governing principle, leads to his destruction, and labour educates him to virtue. Antisthenes used to say he would rather be mad than delighted (*μανείην μᾶλλον ἢ ἡσθείην*). The pattern for himself and his pupils was the laborious life of Heracles. Virtue itself is referred, as with Socrates, to wisdom or insight; and hence it is also maintained that virtue is one and can be taught; but in this case strength of will coincides with insight, and moral practice with instruction. In itself this virtue is chiefly of a negative character; it consists in independence of externals, in freedom from needs, in eschewing what is evil, and it appears (according to Arist. 'Eth. N.' ii. 2,

1104 b. 24) to have been described even by the Cynics as apathy and repose of feeling. The less that the Cynics found this virtue among their contemporaries, the more exclusively did they divide the world into two classes of the wise and the fools; the more absolutely did they ascribe to the former all perfection and happiness, and to the latter all vice and misery. The virtue of the wise man was a possession which could not be lost. In their own conduct they exhibit as their ideal an exaggeration of the Socratic freedom from needs. Even Antisthenes boasts (Xen. 'Symp.' 4, 34 ff.) the wealth which he gained by restricting himself to what was absolutely indispensable; but he possessed a dwelling, however humble it might be. After the time of Diogenes, the Cynics led a professional mendicant life, without any habitations of their own, living on the simplest food, and content with the most meagre clothing (the *tribon*). Their principle was to harden themselves against renunciation, disaster, and sorrow; they proved their indifference to life by voluntarily abandoning it. As a rule they renounced family life, in the place of which Diogenes proposed the community of women; they ascribed no value to the contrast of freedom and slavery, because the wise man, even though a slave, is free and a born ruler. Civic life was not a requisite for the wise man, for he was at home everywhere, a citizen of the world. Their ideal polity was a state of nature in which all men lived together as a herd. In their conduct they purposely rebelled, not only against custom and decency, but not unfrequently against the feelings of natural shame, in

order to exhibit their indifference to the opinions of men. They opposed the religious faith and worship of their people, as enlightened persons; for in truth (*κατὰ φύσιν*) there was, as Antisthenes says with Xenophanes, only one God, who is unlike anything visible; it is custom (*νόμος*) which has created a variety of gods. In the same way the Cynics saw a real worship in virtue only, which made the wise friends of the gods; with regard to temples, sacrifices, prayers, vows, dedications, prophecies, they expressed themselves with the greatest contempt. Homeric and other myths were recast by Antisthenes for a moral object. The Cynics regarded it as their peculiar mission to attach themselves to moral outcasts; and no doubt they had a beneficial influence as preachers of morality and physicians of the soul. If they were reckless in attacking the folly of men, if they opposed over-cultivation by the coarse wit of the common people, and the corruption of their times by an unbending will, hardened almost to the point of savagery, in a pharisaic contempt of mankind, yet the harshness of their conduct has its root in sympathy with the misery of their fellow-men, and in the freedom of spirit to which Crates and Diogenes knew how to elevate themselves with cheerful humour. But science could expect little from these mendicant philosophers, and even among the most celebrated representatives the extravagances of the school are unmistakable.

§ 38. *The Cyrenaic School.*

Aristippus of Cyrene, who, according to Diog. ii. 83, was older than Æschines, and so, no doubt, somewhat older than Plato, appears to have become acquainted with the doctrines of Protagoras while yet resident in his native town. At a later time he sought out Socrates in Athens and entered into close relations with him. Yet he did not unconditionally renounce his habits of life and views. After the death of Socrates, at which he was not present, he appears for a long time to have resided as a Sophist in various parts of the Grecian world, more especially at the court of Syracuse—whether under the elder or the younger Dionysius or both is not clear. In Cyrene he founded a school which was known as the Cyrenaic or Hedonistic. His daughter Arete and Antipater were members of it. Arete educated her son Aristippus (ὁ μητροδίδακτος) in the doctrines of his grandfather. The pupil of Aristippus was Theodorus the atheist, and indirectly Hegesias and Anniceris were pupils of Antipater (all three about 320–280). Their contemporary Euemerus, the well-known common-place rationalist, is perhaps connected with the Cyrenaic school.

The systematic development of the Cyrenaic doctrine must be ascribed, in spite of Eusebius ('Præp. Evang.' xiv. 18, 31), to the elder Aristippus. This is proved partly by the unity of the school, and partly by the reference to the doctrine in Plato ('Phileb.' 42 D f.; 53 C) and Speusippus, who, according to Diogenes (iv. 5),

composed an 'Aristippus.' So far as any indications go, at least a part of the writings ascribed to Aristippus were genuine. Like Antisthenes, Aristippus measured the value of knowledge by its practical usefulness. He despised mathematics, because they did not inquire what is wholesome or harmful; he considered physical investigations to be without object or value; and of discussions concerning the theory of knowledge he only adopted what was of use in establishing his ethics. Our perceptions, he said, following Protagoras, instruct us only about our own feelings, not about the quality of things or the feelings of other men; and therefore it was justifiable to gather the law of action from subjective feelings only. But all feeling consists in motion (Protagoras); if the motion is gentle the result is pleasure; if rough or hasty, the result is pain; if no motion takes place, or but a slight motion, we feel neither pleasure nor pain. That of these three conditions pleasure alone is desirable, that the good coincides with the pleasant, and the bad with the unpleasant, Aristippus believed to be declared to everyone by the voice of nature. Thus the crowning principle of his ethics is the conviction that all our actions must be directed to the object of gaining for us as much pleasure as possible. By pleasure Aristippus does not, like Epicurus after him, think only of repose of spirit, for this would be the absence of any feeling but of positive enjoyment. Even happiness, as a state, cannot, in his opinion, be the object of our life, for only the present belongs to us, the future is uncertain, and the past is gone.

What kind of things or actions bring us pleasure is indifferent, for every pleasure as such is a good. Yet the Cyrenaics would not contend that there was not a distinction of degrees among enjoyments. Nor did they overlook the fact that many of them were purchased by far greater pain, and from these they dissuaded their followers. Finally, though the feelings of bodily pain and pleasure are the more original and potent, they were aware that they were pleasures which did not arise immediately out of bodily conditions. Along with this they recognised the necessity of correctly estimating the relative value of various goods and enjoyments. This decision, on which depends all the art of living, we owe to prudence (*φρόνησις, ἐπιστήμη, παιδεία*) or philosophy. It is this which shows us what use we are to make of the goods of life, it liberates us from fancies and passions which disturb the happiness of life, it qualifies us to apply everything in the manner best suited for our welfare. It is therefore the first condition of all happiness.

Agreeably with these principles Aristippus proceeded, in his rules of life and in his conduct—so far as tradition allows us to judge of this—in a thoroughgoing manner to enjoy life as much as possible. But under all circumstances he remained master of himself and his life. He is not merely the capable man of the world, who is never at a loss when it is needful to provide the means of enjoyment (occasionally in an unworthy manner), or to find a witty and clever turn in order to defend his conduct. He is also the superior mind, which can adapt itself to every situation, extract the

best from everything, secure his own cheerfulness and contentment by limiting his desires, by prudence and self-control.[1] He met his fellow-men in a gentle and kindly spirit; and in his later years certainly sought to withdraw himself from civic life (as in Xen. 'Mem.' ii. 1), in order to lose nothing of his independence. He had the warmest veneration for his great teacher; and in the value which he ascribed to insight (prudence), in the cheerfulness and inward freedom which he gained by it, we cannot fail to recognise the influence of the Socratic spirit. Yet his doctrine of pleasure, and his search after enjoyment, in spite of the extent to which they rested on the foundation of the Socratic ethics, are opposed essentially to the teaching of his master, just as his sceptical despair of knowledge contradicts the concept-philosophy of Socrates.

In the Cyrenaic school this contradiction of the elements contained in it came to the surface in the changes which were made in the doctrine of Aristippus about the beginning of the third century. Theodorus professed himself an adherent of the school, and from their presuppositions he deduced the extreme consequences with cynical recklessness. But in order to render the happiness of the wise man independent of external circumstances, he sought to place it, not in particular enjoyments, but in a gladsome frame of mind (*χαρά*), of which insight had the control. Hegesias, the *πεισιθάνατος*, had such a lively sense of the evil of life that he despaired of any satisfaction in positive

[1] Omnis Aristippum decuit color et status et res,
Tentantem majora, fere præsentibus æquum.—Hor. *Ep.* i. 17. 23.

enjoyment, and passing beyond Theodorus he found the highest object of life in keeping himself clear of pain and pleasure by indifference to all external things. Finally Anniceris, though he would not give up the doctrine of pleasure as a principle, placed essential limitations upon it, when he ascribed so high a value to friendship, gratitude, love of family and country, that the wise man would not shrink from sacrifices on their account.

III. Plato and the Older Academy.

§ 39. *The Life of Plato.*[1]

According to the trustworthy statements of Hermodorus and Apollodorus (Diog. iii. 2, 6), Plato was born in Ol. 88, 1 (427 B.C.), and ancient tradition fixed the seventh of Thargelion (May 26–7 or 29–30) as his birthday. Both his parents, Aristo and Perictione, belonged to the ancient nobility. At first he was called Aristocles, after his grandfather. The social and political position of his family secured for him on the one hand the careful cultivation of his great gifts of intellect; and on the other inclined his superior nature from the first to the aristocracy. The artistic talent which excites our admiration in the writings of Plato expressed itself in the poetical attempts of his youth. He was first instructed in philosophy by Cratylus (see *supra*, p. 71); his connection with Socrates began in his

[1] Recent monographs on the subject are: K. F. Hermann, *Gesch. u. Syst. der Plat. Phil.* 1 (and only) vol. 1839, s. 1–126. H. v. Stein, 7 *Bücher z. Gesch. d. Platonismus* (1864), ii. 158 ff. Grote, *Plato*, 1865, 3rd edit. 1875. Chaignet, *La vie et les écrits de Platon*, 1871. Steinhart, *Platon's Leben*, 1873.

twentieth year, and in eight years of friendly confidence he penetrated more deeply than any other into the spirit of his master. But these years were also employed in making himself acquainted with the doctrines of the older philosophers.

After the death of Socrates, at which he was not present, according to the statement in the 'Phædo' (59 B) which is probably without foundation, he repaired with the other Socratics to Euclides at Megara in order to withdraw himself from some kind of persecution. Here he remained for no long time and then set out upon travels which took him to Egypt and Cyrene. On his return he appears to have first remained at Athens, where for eight years he was occupied, not in writing only, but also as a teacher, at any rate in a narrow circle. Then he proceeded (about 388 B.C.) to Lower Italy and Sicily, being now forty years of age, according to 'Epistle' vii. 324 A. Here he visited the court of Dionysius the elder, with whom he fell into such ill favour that the tyrant handed him over to Pollis, a Spartan, and he was sold as a slave in the market of Ægina. Being ransomed by Anniceris the Cyrenaic, he returned to Athens, and is now said for the first time to have formally opened a school in the Gymnasium of the Academy, and afterwards in his own gardens, which were close at hand. Besides philosophy he taught mathematics, in which he was one of the greatest proficients of his time. He not only gave instructions in conversation but also delivered lectures, as is proved beyond a doubt, for the later period; the members of the society were brought together every month at common

meals. He renounced politics, because in the Athens of his time he found no sphere for his action. But when, after the death of Dionysius the elder (368 B.C.), he was invited by Dion to visit his successor, he did not refuse the invitation, and, badly as the attempt ended, he repeated it, apparently at Dion's wish, some years afterwards. On the second occasion the suspicion of the tyrant brought him into great danger, from which he was only liberated by Archytas and his friends. Returning to Athens, he continued his scientific activity with unabated vigour till his death, which took place in Ol. 108, 1 (347 B.C.), when he had completed his eightieth year. Of his character antiquity speaks with almost unanimous veneration, and the verdict is confirmed by his writings. The picture of an ideal intellect, developed into moral beauty in the harmonious equipoise of all its powers, and elevated in Olympian cheerfulness above the world of change and decay, which his writings present to us, is also expressed in those myths by which the philosopher at a very early time was brought into connection with the Delphian deity.

§ 40. *Plato's Writings.*

Plato's activity as an author extends over more than fifty years. It began apparently before, and beyond doubt immediately after, the death of Socrates, and continued to the end of his life. All the works which he intended for publication have come down to us; but in our collection not a little that is spurious is mingled with what is genuine. Besides seven small dialogues considered as spurious even in antiquity, we

possess thirty-five dialogues, a collection of definitions, and thirteen (perhaps eighteen) letters. Of these writings part are supported not only by internal evidence, but by the witness of Aristotle.[1] The 'Republic,' the 'Timæus,' the 'Laws,' the 'Phædo,' the 'Phædrus,' the 'Symposium,' the 'Gorgias,' the 'Meno,' the 'Hippias' ('Minor'), are quoted by Aristotle as Plato's either by name or in such a manner that their Platonic origin is assumed as certain. The 'Theætetus,' the 'Philebus,' the 'Sophist,' the 'Politicus,' the 'Apology' are referred to by Aristotle in a manner so unmistakable that we can neither doubt his acquaintance with these writings nor his recognition of their Platonic origin. The case is the same with the 'Protagoras' and the 'Crito' (44 A; cf. Arist. 'Fr.' 32). We have less certainty in regard to the 'Lysis,' the 'Charmides,' the 'Laches,' the 'Cratylus,' and the 'Hippias Major.' The 'Euthydemus' is referred to only in the 'Eudemian Ethics' (vii. 14, 1247 b. 15); the 'Menexenus' in a part of the 'Rhetoric,' which is apparently post-Aristotelian ('Rhet.' iii. 14, 1415 b. 30). But as it cannot be maintained that Aristotle must have mentioned all the works of Plato which he knew in the writings which have come down to us, we can only conclude that he is unacquainted with a work because he does not mention it, when we can prove that, if he had known it, he must have mentioned it in a particular place. But this in fact we never can prove. With regard to any internal characteristics for distinguishing the genuine and spurious, we must not

[1] On which see Bonitz, *Index Aristotel.* p. 598; *Plato and the Older Academy*, p. 54 ff.

overlook the fact that on the one hand a clever imitation in an interpolated treatise would give the impression of genuineness, and on the other even a Plato cannot have produced works equally perfect. So rich an intellect could not be restricted to one form of exposition: he may have had reasons to content himself in some of his dialogues with merely preparatory discussions, leaving the last word unspoken; and his views no less than his style may have undergone changes in the course of half a century. Lastly, much may appear to us strange merely because we have no acquaintance with his special circumstances and relations. By recent scholars the genuineness of the 'Protagoras,' 'Gorgias,' 'Phædrus,' 'Phædo,' 'Theætetus,' 'Republic,' and 'Timæus' has been universally or almost universally acknowledged.[1] The 'Sophist,' 'Politicus,' and 'Parmenides' have been rejected by Socher and Schaarschmidt, and in part by Suckow and Ueberweg; the 'Philebus' and 'Cratylus' by Schaarschmidt; the 'Meno' and 'Euthydemus' by Ast and Schaarschmidt; but partly by their internal character, and partly by the evidence of Aristotle and by references

[1] Besides the numerous discussions on separate works we may quote Schleiermacher, *Plato's Werke*, 1804 (2. Aufl. 1816); Ast, *Plato's Leben und Schriften*, 1816. Socher, *Ueber Plato's Schriften*, 1820. K. F. Hermann (*sup.* p. 126, *note*); Ritter, ii. 181 ff. Brandis, ii. a. 151 ff. Stallbaum in the introductions to his edition of Plato. Steinhart in *Plato's Werke* übers. v. Müller, 1850 ff. Suckow, *Form der platonischen Schriften*, 1855; Munk, *Natürl. Ordnung d. plat. Schr.*, 1857. Susemihl, *Genet. Entwickl. d. plat. Phil.* 1855 f. Ueberweg, *Untersuch. üb. Aechtheit u. Zeitfolge plat. Schr.* 1861. *Grundriss*, i. § 4. H. v. Stein, *7 Bücher z. Gesch. d. Platonismus*, 1862, 1864. Schaarschmidt, *Die Sammlung d. plat. Schr.* 1866. Grote, *Plato*, 1865. Ribbing, *Genet. Entwickl. d. plat. Ideenlehre*, 1863 f. ii. Thl. Zeller, *Plato and the Older Academy*, chap. ii.

in Plato, they are proved to be genuine.[1] The same holds good of the 'Critias,' which Socher and Suckow rejected, the 'Apology' and the 'Crito,' which Ast considered un-Platonic. The 'Laws,' which, following Ast, I attacked in my 'Platonic Studies,' and which Suckow, Ribbing, Strümpell ('Prakt. Phil. d. Gr.' i. 457), and Oncken ('Staatsl. d. Arist.' i. 194 ff.) consider spurious, must be regarded both on internal and external grounds as a work of Plato which he left unfinished, and which was published, not without alteration, by Philippus of Opus (according to Diog. iii. 37). The 'Hippias Minor,' for which we have good evidence, may be defended as a work of youth, the 'Euthyphro' as an occasional treatise, and in regard to the 'Lysis,' 'Charmides,' and 'Laches,' there is less difficulty still. On the other hand, the 'Menexenus' is justly given up by most authorities; and the balance is strongly against the 'Hippias Major,' the 'Alcibiades I.,' and the 'Ion.' The 'Alcibiades II.,' the 'Theages,' the 'Anterastæ,' the 'Epinomis,' the 'Hipparchus,' the 'Minos,' the 'Clitophon' are only defended by Grote on the ground of the supposed genuineness of the Alexandrian lists (see Diog. iii. 56 ff.). The spuriousness of the 'Definitions' is beyond doubt: the 'Letters' are the work of various authors and dates, but not one was written by Plato.

The date of the writings of Plato can only be fixed approximately in the case of a few by their relation to certain events ('Euthyphro,' 'Apology,' 'Crito,'

[1] *Parm.* 129 B ff., 130 E ff., 14 C, 15 B; *Meno*, 80 D ff., in are plainly referred to in *Philebus*, *Phædo*, 72 E f.

'Meno,' 90 A; 'Theætetus,' *init.*, 'Symp.' 193 A), or by trustworthy statements ('Laws,' see above). The order can be explained either by a certain arranged plan, or from Plato's own development, or from the accidental relation of the various occasions and impulses which led to the composition of each work. The first principle only has been regarded by Schleiermacher, the second by Hermann, the third by Socher and Ast; while recent scholars have considered all three as correct within limits, however different their verdict on the effect of each upon the result. No assistance can be derived for the decision of the question and the settlement of the order in which the various treatises were composed from the traditional classifications of the dialogues, or the trilogies into which Aristophanes (about 200 B.C.) arranged fifteen of the dialogues, or the tetralogies into which Thrasylus (20 A.D.) arranged the whole. With the exception therefore of a few chronological data, we are limited entirely to internal evidence; and in this the most secure grounds are afforded by the references, direct or indirect, in the dialogues to one another, and the philosophic views set forth in each. Next in importance is the character of the artistic style and of the language. To gather from one or the other a decisive criterion for the arrangement of the whole works of Plato is an attempt which hitherto has failed, and Munk's assumption that the dialogues can be arranged according to the age of Socrates in them breaks down entirely.

Following these lines, we can first of all assign a portion of the dialogues, with Hermann, to the Socrati

period of Plato, *i.e.* to the period in which he had not as yet advanced essentially beyond the position of his teacher. This period seems to have come to an end with his travels to Egypt. To it we may ascribe the 'Hippias Minor,' the 'Euthyphro,' the 'Apology,' the 'Crito,' the 'Lysis,' the 'Laches,' the 'Charmides,' and the 'Protagoras' as the final and culminating point in the series. On the other hand, in the 'Gorgias,' 'Meno,' and 'Euthydemus,' and still more definitely in the 'Theætetus,' 'Sophist,' 'Politicus,' 'Parmenides,' and 'Cratylus,' the doctrines of ideas, of pre-existence, immortality and the migration of souls, and, along with them, the proofs of an acquaintance with Pythagoreanism are too distinct to allow us to follow Hermann in placing the 'Euthydemus,' 'Meno,' and 'Gorgias' in the 'Socratic period;' the dialectical dialogues ('Theætetus,' &c.) in the 'Megarian period,' for which indeed there is no sufficient historical evidence; and, assigning Plato's more precise acquaintance with the Pythagorean philosophy to his Sicilian journey, to bring down the 'Phædrus' to the period subsequent to this, 387–6 B.C. On the contrary, though the 'Phædrus' cannot, with Schleiermacher, be regarded as the earliest treatise of Plato, or placed, with Usener, in 402–3 B.C. ('Rh. Mus.' xxxv. 131 ff.), there is much to show that it was composed about 396 B.C., before the 'Gorgias,' the 'Meno' (which cannot have been written before 395 B.C.; cf. 90 A), and the 'Theætetus' (not before 394). If, therefore, in these and in the dialectical dialogues Plato proceeds step by step in the investigations of which he had given a summary in the 'Phædrus,' the

reason is that he has in view a methodical foundation and development of his doctrine. The 'Symposium' (not before, but certainly not long after, 385 B.C.; cf. 193 A), 'Phædo,' and 'Philebus' appear to be later. With the last-mentioned is connected the 'Republic,' as we see from the direct reference in 505 B, for there is no reason to break up this dialogue with Hermann and Krohn[1] into different and heterogeneous parts. On the 'Republic' follows the 'Timæus,' the continuation of which is the 'Critias,' an unfinished work, owing perhaps to Plato's Sicilian travels. The 'Laws,' which is the most comprehensive work of Plato, doubtless occupied the aged philosopher during a series of years, and was not published till after his death.

§ 41. *The Character, Method, and Divisions of the Platonic System.*

The Platonic philosophy is at once the continuation and the supplement of the philosophy of Socrates. Plato has not, any more than his master, a merely theoretic inquiry in view. The whole conduct of man is to be penetrated and guided by the thoughts which the philosopher furnishes; his moral life is to be reformed by philosophy. Like Socrates, he is convinced that this reform can only be founded upon knowledge, and that the only true knowledge is that which proceeds from the science of concepts. But he desires to develop this knowledge into a system. With this aim he first reviews all his predecessors among Greek philosophers, and avails himself of all the points of contact

[1] *D. platon. Staat*, 1876; *Die platon. Frage*, 1878.

which they present; then, in working out his system, he passes far beyond the limits of the Socratic philosophy. Out of the Socratic dialectic grows his doctrine of ideas; out of the ethical principles of his master a detailed ethics and politics; and both are supplemented by a philosophy of Nature, which though inferior in importance to the other branches, yet fills up the most remarkable deficiencies in the Socratic philosophy in harmony with his whole point of view. It is due to this need of forming a system that not only is the scientific method of Socrates extended in fact in the direction of the formation of concepts and their development, but the rules of this method are fixed more definitely, and thus the way is prepared for the logic of Aristotle. Yet in the Platonic writings Socrates' mode of developing ideas in dialogue is retained, because truth cannot be possessed as a tradition but only as an independent discovery. But the personal dialogue becomes artistic, and approaches more and more to continuous speech. Socrates forms the centre of the dialogue, partly from feelings of affectionate regard, and partly from artistic reasons, and above all because philosophy as a living power can only be completely exhibited in the perfect philosopher. This exposition is enlivened by the myths in which Plato's poetical nature is exhibited, no less than in the brilliant mimicry of many dialogues. But at the same time the myths point to the gaps in the system, inasmuch as they are only introduced where the subject cannot be treated with exact scientific precision.

The division of philosophy into Dialectic, Physics,

and Ethics (cf. § 50), is found in fact though not in form in Plato; but these systematic inquiries are inferior to the propædeutic, which occupy the largest space in the writings of his earliest years, and recur in the later works.

§ 42. *The Propædeutic Foundation of the Platonic Philosophy.*

In order to justify philosophy and define its purposes, Plato points out deficiencies both in the ordinary consciousness and in the sophistical illumination which sought to usurp its place. These deficiencies can only be met by philosophic knowledge and life. Ordinary consciousness in its theoretic side is consciousness making presentations; it seeks truth partly in perception, partly in presentation or opinion (δόξα). This practical character is expressed in ordinary virtue and in the common principles of morality. Plato shows on his part that knowledge does not consist in perception, nor in right presentations. Perception does not show us things as they are but as they appear to us, and therefore under the most variable and opposite forms. ('Theæt.' 151 E ff. &c.) Presentation, on the other hand, even though correct in regard to what is presented, is not conscious of its principles; it does not rest on instruction but on simple persuasion, and is always in danger of being transformed into error. Knowledge is always true, but presentation may be true or false. Even right presentation is only midway between knowledge and ignorance. ('Meno,' 97 ff.; 'Theæt.' 187 ff.; 'Sym.' 202; 'Tim.' 51 E.) The case is the same

according to Plato with ordinary virtue. Resting on custom and right presentation, not on knowledge, and therefore without real teachers, it is entirely at the mercy of accidents (*θεία μοῖρα*, 'Meno,' 89 D ff.; 'Phædo,' 82, &c.). It is so uncertain of its own principles that it permits evil as well as good (evil to enemies and good to friends); so impure in its motives that it has no other foundations for moral claims than pleasure and profit ('Rep.' i. 334 B ff., ii. 362 E ff.). It is only knowledge which can furnish a secure guarantee for the correctness of action; for action is always governed by the views of the person acting, and no one is voluntarily evil. Hence in his earlier writings, Plato, like Socrates, refers all virtues to insight. But he does not say whether and how far it is possible to speak of a plurality of virtues. Like Socrates, also, he explains insight ('Phædo,' 68 B ff.) as that alone which a man should make the object of his life, and to which he should sacrifice everything else. But insight is not to be found among the Sophists who come forward as the moralists of their time. On the contrary, their teaching would destroy all the foundations of science as well as of morality. The principle that man is the measure of all things, and that what seems true to a man is true for him, overthrows all truth, including the proof of the principle so asserted. ('Theæt.' 170 f., 177 ff.) To maintain that pleasure is the highest object of life, and that everything is permitted to a man which is right in his eyes, is to confound the good with the pleasant, the essential and unchangeable with the phenomenal,

which admits of no fixed limitation. Such a principle mingles that which has an absolute value with what may be good or bad, and is as a rule conditioned by its opposite, pain. ('Gorg.' 466 ff., 488 ff.; 'Phileb.' 23 ff.; 'Rep.' i. 348 ff., vi. 505 C, ix. 583 f.) Hence sophistic, which maintains these doctrines, and rhetoric, which gives them a practical application, can only be regarded as the opposites of the true art of life and science; and can only be regarded as a sort of secondary art, or scientific faculty, which puts appearance in the place of reality. ('Gorg.' 462 ff.; 'Soph.' 223 B ff., 232 ff., 254 A ff., 264 D ff.; 'Phædo,' 259 E ff.)

It is philosophy and philosophy only which renders the service promised by sophistic. The root of philosophy is Eros, the effort of the mortal to win immortality, which attains its proper aim by the progress from the sensual to the intellectual, from the individual to the general, in the intuition and exposition of the idea. ('Symp.' 201 D ff.; 'Phædr.' 243 E ff.). But ideas are known by means of thinking in concepts or dialectical thought (*διαλεκτικὴ μέθοδος*, 'Rep.' vii. 533 C). This thought has a double mission. It forms concepts by which we rise from the individual to the general, the conditioned to the unconditioned, and it divides them. This division brings us down by natural intermediaries from the general to the particular, and thus instructs us in the mutual relation of concepts, the possibility or impossibility of uniting them; their arrangement as superior, inferior, or co-ordinate. In the formation of concepts Plato follows the same principles as his master, but he puts these principles in more precise terms. A

special means for this object is found in the testing of presuppositions by their consequences, which in the 'Parmenides' assumes the form of a development of concepts by antinomies. In regard to classification he demands that it should rest in the qualitative difference of things, and proceed progressively without omitting any intermediate step (this, according to 'Phileb.' 17 A, is exactly the distinction between *διαλεκτικῶς* and *ἐριστικῶς ποιεῖσθαι τοὺς λόγους*). Hence dichotomy is preferred before any other kind of division.[1] But as Plato shows in the Cratylus, the dialectician has also to decide on the correctness of expression in language, since on this entirely depends the extent to which he sets forth the nature of the things which he has to describe. On the other hand, it is a mistake to gather from words conclusions which are only warranted by the concept of the matter. But as knowledge by concepts and moral action were most closely united by Socrates, so also in Plato. Philosophy in his view of it not only includes all knowledge when this is pursued in the correct manner, but it also secures the unfailing fulfilment of moral duties. It is the elevation of the entire man out of the life of the senses; the application of the intellect to the idea: all other cultivation and education is merely a preparation for it ('Rep.' vii. 514 ff., 521 C ff.; ii. 376 E ff.; iii. 401 B ff.), whether it be the cultivation of the character by music and gymnastics, which accustoms a man to do what is

[1] The chief passages in support of this are: *Phædr.* 265 C ff.; *Rep.* vii. 533 C f., 537 C, vi. 511 B; *Parm.* 135 C; *Soph.* 251 ff.; *Polit.* 262 ff.; *Phileb.* 16 B ff.

right and love what is beautiful; or the cultivation of thought by the mathematical sciences, which are mainly concerned in leading men from what is sensuous to what is not sensuous. The peculiar organ of philosophy is the art of thinking by concepts (that is, dialectic), and ideas are the essential object of this thought.

§ 43. *Dialectic, or the Doctrine of Ideas.*

Socrates had explained that only the knowledge of concepts guarantees a true knowledge. Plato goes further, and maintains that it is only by reflection in concepts, in the forms of things, or 'ideas,' that true and original Being can be attained. This principle arose out of the Socratic, owing to the presupposition in which Plato agrees with Parmenides (see *supra*, p. 61), that only Being, as such, can be known; the truth of our conceptions therefore is conditioned by the reality of their object, and keeps step with it. ('Rep.' v. 476, E ff., vi. 511 D; 'Theæt.' 188 D. f.) What is thought, therefore, must be as distinctly separated from what is presented as thinking from forming presentations. ('Tim.' 51 D.) From this point of view the reality of ideas becomes the necessary condition of the possibility of scientific thought.[1] The same result follows from the contemplation of Being as such. All that we perceive, as Heracleitus had shown, is subject to ceaseless change, it is ever alternating between two opposite conditions, and exhibits none of its qualities pure and

[1] *Parm.* 135 B. εἴ γέ τις δὴ ἑκάστου τὴν αὐτὴν ἀεὶ εἶναι, καὶ . . . αὖ μὴ ἐάσει εἴδη τῶν ὄντων οὕτω τὴν τοῦ διαλέγεσθαι δύναμιν εἶναι . . . οὐδὲ ὅποι τρέψει τὴν παντάπασι διαφθερεῖ. διάνοιαν ἕξει, μὴ ἐῶν ἰδέαν τῶν ὄντων

entire. That only can be lasting, consistent, and free from admixture with everything else which is inaccessible to the senses, and known by thought only. All that is individual has number and parts; but individual things become that which they are only by the common nature which is apprehended in the concept. All that is phenomenal has its object in a Being; it is so, because it is good that it should be so (the world, as Anaxagoras and Socrates taught, is the work of reason), and in like manner all our activity should be directed to some rational aim. These objects can only lie in the realisation of that in which thought discovers the unchangeable originals of things—in concepts.[1] Hence, in the belief of Plato, we are compelled on every ground to distinguish the non-sensuous essence of things as the only true Being from their appearance as objects of sense.

As is clear from what we have said, Plato sees this essence of things in their form (*εἶδος*, *ἰδέα*—the two are identical in meaning), *i.e.* in the general, in that which is found in common in a series of individual things, and makes up the concept common to them all. 'We assume one idea when we denote a number of separate things by one name' ('Rep.' x. 596 A, cf. vi. 507 B; 'Theæt.' 185 B f.; 'Parm.' 132 C; Arist. 'Metaph.' xiii. 4, 1078 b. 30, i. 9, 990 b. 6, &c.); on the other hand, a separate thing as such (as perhaps the soul, of which Ritter and others believed this to hold good) can never

[1] *Phædo*, 74, A ff., 78 D f., 97 B–103 C; *Rep.* v. 478 E ff., vii. 523 C ff., x. 596 A; *Tim.* 27 E. ff., 68 E; *Parm.* 131 E; *Phileb.* 54 B; *Theæt.* 176 E; Arist. *Metaph.* i. 6, *init.*; xiii. 9, 1086 a. 35 ff., cf. i. 9, 990 b. 8 ff.

be an idea. But according to Plato, whose contention with Antisthenes turns on this point (see p. 118), this universal does not exist merely in our thought or in the thought of the Deity.[1] It exists purely for itself and in itself, and is always in the same form, subject to no change of any kind; it is the eternal pattern of that which participates in it, but separate from it (*χωρίς*), and only to be contemplated with the intelligence ('Symp.' 211 A; 'Phædo,' 78 D, 100 B; 'Parm.' 135 A; 'Rep.' vi. 507 B; 'Tim.' 28 A, 51 B f.); the 'ideas' are as Aristotle is accustomed to denote them, *χωριστά*; and it is due to this independent existence that they are the only true and original elements of reality, to which everything that becomes or changes owes what reality it possesses. They are named the *οὐσία*, the *ὄντως ὄν*, *ὃ ἔστιν ὄν*, the self-existence, or the essence (an sich) of things,[2] and because there is only one idea of each class of things ('Parm.' 131 E, 132 C; 'Rep.' vi. 493 E, 507 B), ideas are also termed *ἑνάδες* or *μονάδες* ('Phileb.' 15 A f.). Thus they are opposed as having unity to the plurality of things, as unchangeable to change. If in the world of the senses we can with Heracleitus find nothing but a becoming,

[1] An assumption which has had many adherents from the time of the Neo-Pythagorean and Neo-Platonic schools till now. Plato expressly opposes it: *Parm.* 132 B; *Tim.* 51 B; and *Rep.* x. 597 B cannot be quoted in its favour.

[2] *αὐτὸ ἕκαστον*, *αὐτὸ τὸ καλόν*, *αὐτὸ τὸ ἀγαθόν*, *Phædo*, 65 D, 78 D; *αὐτὸς δεσπότης ὃ ἔστι δεσπότης*, *Parm.* 133 D; *σφαῖρα αὐτὴ ἡ θεία*, *Phileb.* 62 A; *αὐτὸ καλόν*, &c. *ὃ ἔστιν ἕκαστον*, *Rep.* vi. 507 B: hence in Aristotle not only *αὐτὸ τὸ ἀγαθόν*, &c., but also *αὐτὸ ἀγαθόν*, *αὐτὸ ἓν καὶ ὄν*, and in a word *αὐτοάνθρωπος*, *αὐτοαγαθόν*, *αὐτοεπιστήμη*, *αὐτοέκαστον*, &c. Cf. Bonitz, *Ind. Arist.* 124 b. 52 ff., 123 b. 46 ff.

ideas present to us Being, in which alone Plato, like Parmenides whom he so highly honoured, found the real object of science. But he does not regard this Being as admitting no distinctions, like the Being of the Eleatics; in the 'Sophist' (244 B ff., 251 ff.) he shows that everything that has Being, as a definite object, includes in spite of its unity a plurality of qualities, and in being distinct from everything else it possesses an infinite amount of not-being (*i.e.* other-being). Hence in every concept we must ask what are the other concepts with which it can or cannot combine, and in the 'Parmenides' Plato indirectly contradicts both the assumption that there is only plurality without unity, and the assumption that there is only unity without plurality. In his later period he followed the Pythagoreans in designating the ideas as numbers (cf. § 50). This form of exposition is not found in his writings, though he approaches to it in the 'Philebus' (14 C), where with a distinct reference to the Pythagorean doctrine (and Philolaus more particularly) he argues that not only things but also the unified eternal essences consist of one and many, and are at once limited and unlimited. In the same way the unchangeability of ideas must not be taken to mean that it is impossible to conceive them as the causes of what becomes and changes. It is only from them that what is changeable receives the Being which it possesses, and in the 'Phædo' (99 D ff.) Plato actually denotes the ideas as the causes by which all that is, is. According to 'Rep.' vi. 508 E, vii. 517 B, the idea of good is the cause of all perfection, of all Being and knowledge, but

the Divine reason is coincident with the good ('Phil.' 22 C), and in the 'Philebus' the 'cause' from which comes all order and reason in the world occupies the place elsewhere taken by the ideas ('Phil.' 23 C f., 26 E f., 28 C ff.). Still more definitely does the 'Sophist' show that true Being is regarded as operative force, to which therefore motion, life, soul, and reason must be assigned (248 A ff.). How this can be harmonised with the unchangeability of ideas Plato has not attempted to show, and with him this dynamic conception of ideas as operative powers must be kept in the rear of the ontological conception, in which they are the unchangeable forms of things.

As the ideas are nothing else than general ideas raised to a separate existence as metaphysical realities, there must be ideas of everything which can be referred to a general concept, and denoted by a corresponding word. This conclusion was drawn by Plato. In his writings we find ideas of all possible things, not of substances only, but of qualities, relations and activities; not of natural things only, but of the creations of art; not only of what is valuable, but of what is bad and contemptible. We find the great-in-itself, the double-in-itself, the name-in-itself, the bed-in-itself, the slave-in-himself; the 'idea' of filth, injustice, not-being, &c. It was not till his later period that Plato limited ideas to natural objects (cf. p. 142). All these ideas stand in a definite relation to one another, and to set their relation forth systematically is the mission of science (see p. 138). Yet not only is the thought of an *à priori* construction of this system of

concepts unknown to Plato, but he hardly makes any attempt to set it forth logically. It is only of the supreme apex, which as such is called the 'idea of good,' that he speaks at length ('Rep.' vi. 504 E ff., vii. 517 B). All that is in the world is as it is, because it is best so; and it is only really conceived when it is referred to the good as its final object ('Phædo,' 97 B). For Plato this thought assumes the shape that the good is the final ground of all Being and knowledge; it is the idea of good which, elevated above both, gives to the existent its reality and to him who knows his capacity for reason and his knowledge. For Plato, therefore, the good as the absolute ground of all Being is coincident with the Deity, which is described precisely as Being ('Tim.' 28 C, 37 A), and is explained to be identical with it ('Phileb.' 22 C, cf. Stob. 'Ecl.' i. 58). But the question whether the good, which like all ideas is a universal, and as the highest idea must be the most universal and the highest class, can be at once the Deity, and thus become a person, Plato never raised; indeed he never inquired about the personality of God.

§ 44. *Plato's Physics, Matter, and the World-soul.*

Though each idea is one, the things which come under it are infinite in number; though the ideas are eternal and unchangeable, things are regarded as derivative, perishable, and in constant change; though the idea is what it is, pure and complete, things are never so. Ideas possess complete Being, but things waver between Being and not-being, just as presentation, of

which they are the object, wavers between knowledge and ignorance. This incompleteness of sensuous existence, Plato believes, can only be explained from the fact that it only springs in part from the idea, while part of its origin is derived from another and different principle. As all that it possesses of reality and completeness springs from the idea, the nature of the second principle can only be sought in that which distinguishes the phenomena of sense from the idea. It can only be thought of as unlimited, ever-changing, non-existent, and unknowable. These are the definitions which Plato ascribes to that basis of sensuous existence which, following Aristotle, we are accustomed to call the Platonic 'matter.' He describes it as the unlimited ('Phil.' 24 A ff.), or, as he asserted later (according to Aristotle), as the great and small; as that which is in itself formless, but lies at the base of all the changing forms of phenomena, and includes them; as space (*χώρα*) which allows room to all that becomes; as something which cannot be known by thought or perception, or presentation, but about which only laborious conclusions can be drawn (by a *λογισμὸς νόθος*, 'Tim.' 49 A to 52 D). It harmonises with this, that Plato is said, according to Aristotle[1] and Hermodorus (*ap.* Simpl. 'Phys.' 248, 13), to have spoken of it simply as not-being. For Leucippus and Democritus had already placed empty space on an equality with not-being, and if Being and not-being are mingled in sensuous things, and all the Being is derived from the

[1] *Phys.* i. 9, 191 b. 36; 192 a. 6; cf. iii. 2, 201 b. 20. Eudemus in Simpl. *Phys.* 431. 8, and also *Tim.* 52 E, 57 E.

idea, only not-being is left for the second constituent element, or matter. If true being (according to 'Rep.' v. 477 A) is the object of knowledge by thought, and that which hovers between Being and not-being is the object of presentation and perception, that which cannot be known in either way must be not-being. Hence by Plato's matter we have to understand not a mass filling space but space itself. He never mentions it as that out of which but only that in which things arise. According to him (cf. § 45), bodies are formed when certain portions of space are thrown into the shapes of the four elements. That it is not a corporeal mass out of which they arise in this manner is clear from the assertion that when they change into one another they are broken up into their smallest *plane* dimensions in order to be compounded anew out of these. To carry this theory out strictly was difficult; and in another place ('Tim.' 30 A, 52 D f., 69 B) he represents the matter as if the Deity, when engaged in the formation of the elements, had found 'all that is visible' already in existence as a chaotic mass moving without rule. But this description cannot in any case be taken strictly, for it would not suit with a mass which fills space, but is otherwise without form and definition ('Tim.' 49 E ff.). If we must make some distinction between this form of exposition and Plato's own opinion, there is nothing to prevent us from supposing that the condensation of space into matter is one of those mythical traits in which the 'Timæus' is so rich.

Though it is said to be not-being which distinguishes things from ideas, the real in both is the same. Things

owe all the being they have to the presence (*παρουσία*) of ideas and to their participation in them (*μέθεξις*, *κοινωνία*). But as, on the other hand, 'not-being' is the source of all the qualities by which the corporeal is distinguished from the incorporeal, we must recognise in them a second kind of causality besides that of the ideas and the causality of a blind, irrational necessity, which is related, not to the natural aims, but to the *conditions* of their realisation, and limits reason in realising them ('Tim.' 46 C f., 48 A, 56 C; 'Phaedo,' 98 B ff.). Besides that which things bring into life from ideas, there is in them a second element to which we must also attribute a being, only of a different kind from the being of ideas. Ideas and things appear separate from another: the first are the patterns (*παραδείγματα*, 'Theæt.' 176 E, 'Tim.' 28 C, &c.), these are the copies. From this point of view the Platonic system, though not pantheistic—for the numerous ideas are not parts or emanations of a supreme idea—is nevertheless monistic. It is a pure idealism, for things are immanent in ideas. From the other point of view it is dualistic, for ideas are separate from things and things from ideas. But its peculiar nature can only be recognised when it is known why Plato did not abandon one or the other of these views, or carry neither out without regard to the other, or attempt to unite both into an harmonious whole.

If the corporeal is separated from the idea by such a wide interval as Plato assumes, an intermediating member is needed to combine the two, and this member can only be the soul. The soul alone, as the element

which moves itself, can be the source of movement and life (ἀρχὴ κινήσεως) for the corporeal world. Only by its intervention can reason be planted in the world, and the order of the universe, the power of thought and presentation in individual natural beings, be brought about ('Phaed.' 245 C, 'Laws,' x. 891 E ff., 'Phileb.' 30 A f., 'Tim.' 30 A). The 'Timæus' gives a description of the formation of the world-soul, in which, veiled amid much that is fantastic, the true meaning seems to be that the soul stands midway between ideas and the corporeal world, and unites both. It is incorporeal and ever the same, like ideas, but spread abroad through the world, and moving it by virtue of its own original motion. It includes in itself all the relations of number and measure; it creates all the regularity and harmony of the world. All reason and knowledge in the universe and in the individual are caused by its rationality and knowledge. The question of its personality is obviously not so much as raised by Plato. In the 'Philebus' (25 A ff.) the same position which is here taken by the world-soul is assumed by the 'Limit' (πέρας)—which is also said to be the basis of all order and measure—and in the Aristotelian account of the Platonic doctrines (see *infra*, § 50), by 'mathematics,' the study of which even in Plato himself forms the transition to the study of ideas. Here, however, the form, in the soul the moving and enlivening power, is the connecting link between idea and phenomenon. But though Plato has not put them both on the same level, their close relationship cannot be mistaken.

§ 45. *The Universe and its Parts.*

In order to explain the world from its ultimate sources, Plato in his 'Timæus' avails himself of the customary form of a cosmogony. He represents the creator of the world (δημιουργός) as compounding the soul of the world from its constituent elements in reference to the pattern of the living being (the αὐτοζῷον). Then he takes the matter of the world in the shape of the four elements, and out of these finally constructs the world, and peoples it with organic creatures. But not only are the details of this exposition mythical to a great extent, but the whole is cast in such a mythical form that it is difficult to state accurately how much of it expresses Plato's own scientific conviction. That he recognises the true cause of the world in reason, in ideas, and the deity, is beyond doubt, but the distinction of the creator from the ideas (or more exactly from the highest of the ideas) is part of the exoteric traits (cf. p. 144). Though he does not appear consciously to use the notion of a beginning of the world in time as a mere form for clothing the thought of the dependence of all things upon ideal sources, yet this notion is in striking contradiction to other definitions in his doctrine, especially to the eternity of the human spirit. We must therefore assume that in this notion he is chiefly occupied with that idea, but whether the origin of the world in time is necessary for his object, or in itself conceivable, he has not inquired. The more important in his eyes is the Universal. As the work of reason the world is con-

structed with an object. Phenomena can only be truly explained by final causes, for material causes are merely the conditions without which they are impossible. Plato therefore places a much higher value on the teleological than on the physical view of nature, and in the 'Timæus' he expresses this by the external separation of the two, and the precedence given to the first.

The first step towards the construction of a world was the formation of the material, the four elements. For these Plato gives two sources. From the teleological point of view he requires fire and earth as a condition of the visibility and tangibility of bodies; and he also demands a link between the two, which must consist of *two* proportionals, because we have here to do with bodies; and with Philolaus (p. 53) he denotes four of the five regular bodies as the base-forms of fire, air, water, and earth; then, passing beyond Philolaus, he constructs these bodies from the most minute right-angled triangles, out of which their limiting planes are composed. When the elements pass into one another (as is possible only among the three higher) they are decomposed into the triangles, and formed anew out of them (p. 147). Each element has a natural locality towards which it strives; and all the space in the world is entirely filled by the whole sum of them.

The world is regarded by Plato as a complete orb; the earth is a solid orb resting in the middle; the stars are fixed in spheres or rings (as seems to be the case with the planets), by the revolution of which they are carried round. When all the stars return to their

original position, the great world-year (of 10,000 years) has run its course. With this cycle Plato possibly connects those devastations of the earth by fire and water which he assumes in the 'Timæus' (22 C ff.) and the 'Laws' (iii. 677 A ff.). The stars are rational blessed creatures, the 'visible gods,' and in like manner the Cosmos is the one perceivable god, including in himself all other natures, the copy of the super-sensuous, the most perfect and glorious of created things.

§ 46. *Plato's Anthropology.*

It is part of the perfection of the world that it, like its pattern, the *αὐτοζῷον*, includes in itself all kinds of living beings. But of these man only has an independent interest for Plato; on plants and animals he merely bestows a few occasional remarks of no great importance. In the 'Timæus' he enters into special detail about the human body; yet few of these physiological assumptions stand in any close connection with the Platonic philosophy. The soul of man is in its nature homogeneous with the soul of the universe, from which it springs ('Phil.' 30 A, 'Tim.' 41 D f., 69 C f.). Being of a simple and incorporeal nature it is by its power of self-movement the origin of motion in the body; inseparably connected with the idea of life it has neither end nor beginning.[1] As the souls have descended from a higher world into the earthly body, they return after death, if their lives have been

[1] According to *Phædr.* 245 C f., *Meno*, 86 A, and what follows from the proof of immortality in *Phædo*, 102 ff. Otherwise in the *Timæus*, but cf. p. 149.

pure and devoted to higher objects, to this higher world, while those who need correction in part undergo punishments in another world, and in part migrate through the bodies of men and animals. In its earlier existence our soul has seen the ideas of which it is reminded by the sight of their sensuous copies.[1] The further discussion of these principles Plato has given in mythical expositions, in regard to which he indicates himself that he ascribes no scientific value to the details, which vary greatly. Yet they express his conviction, and it is only in regard to the migration of souls that the question arises whether he seriously assumed the entrance of human souls into the bodies of animals. On the other hand, the attempt to disclaim for Plato the assumption of personal immortality and pre-existence[2] compels us not only to alter the explanations and proofs of the philosopher in the most unjustifiable manner, or explain as merely metaphorical and conventional what he declares to be his most distinct scientific conviction; it also overlooks the fact that the belief in immortality in Plato is closely connected through the doctrine of reminiscence with his theory of knowledge, through the assumption of future retribution with his ethics and theology, through the opposition between the intellectual, which is eternal, and the corporeal, which is perishable, with his entire metaphysics.

[1] The proofs for what is said above are found—besides the *Phædo*, where five proofs are given for immortality—in *Phædr.* 245 C ff.; *Gorg.* 523 ff.; *Meno*, 80 D ff.; *Rep.* x. 608 C ff; *Tim.* 41 D ff.

[2] Teichmüller, *Studien zur Gesch. der Begriffe* (1875) s. 107 ff.; *Die platonische Frage*, 1876.

In accordance with these views Plato can only look for the peculiar essence of the soul in its intellectual nature, its reason (λογιστικόν, 'Phileb.' 22 C; νοῦς). It alone is the divine and immortal part of it; not till it has entered the body is it connected with the mortal part, which again falls into two sections, courage (θυμός, θυμοειδές) and the desires (τὸ ἐπιθυμητικόν—also φιλοχρήματον). Reason has her seat in the head, courage in the heart, desire in the lower body ('Rep.' iv. 435 B ff.; 'Tim.' 69 C f., 72 D; 'Phædr.' 246). But in what relation the unity of personal life stands to this triple division of the soul, to which part self-consciousness and volition belong, how there can be an inclination to the world of sense in a soul which is free from corporeal elements, how bodily conditions and procreation can have the deep influence on the characters of men which Plato ascribes to them—on these questions Plato gives us no help. Nor do we find in him any inquiries into the nature of self-consciousness and the will, and if he assumes clearly the freedom of the will ('Rep.' x. 617 E, 619 B; 'Tim.' 4 E ff.; 'Laws,' x. 904 B), yet we have no indication how we are to unite with this the Socratic principle, equally distinctly expressed, that no one is voluntarily evil ('Tim.' 86 D ff.; 'Laws,' v. 731 C; 734 B, ix. 860 D ff.; 'Meno,' 77 B ff., 'Prot.' 345 D, 358 B).

§ 47. *Plato's Ethics.*

Plato's Ethics received their scientific form and ideal character from the connection into which the ethical principles of his teacher were brought with his own

metaphysics and anthropology. As the soul in its true nature belongs to the world above the senses, and in that only can find a true and lasting existence, the possession of the good or happiness which forms the final goal of human effort can only be obtained by elevation into that higher world. The body, on the other hand, and sensual life, is the grave and prison of the soul, which has received its irrational elements through combination with it, and is the source of all desires and all disturbances of intellectual activity. The true mission of man, therefore, lies in that escape from this world, which the 'Theætetus,' 176 A, regards as an approach to the divine nature, that philosophic death to which the 'Phædo' reduces the life of the philosopher (64 A–67 B.) But, on the other hand, so far as the visible is a copy of the invisible, it is a duty to use the sensuous phenomenon as a means for obtaining an intuition of the idea, and to introduce the ideas into objects of sense. This is the point of view from which Plato proceeds in his principles about Eros (p. 138), and in the inquiry in the 'Philebus' into the *summum bonum* (the result is given in 'Phil.' 61 ff.); for even though he seeks the most valuable part of the good in reason and insight, he desires to adopt into his conception not only knowledge gained by experience, right presentation, and art, but also pleasure so far as this is compatible with health of mind; just as, on the other hand, when treating of pain ('Rep.' x. 603 E f.), he does not require insensibility, but mastery of and moderation in feeling. As in this he recognises the importance of externals for men, so

the essential condition of his happiness is, in Plato, exclusively his intellectual and moral nature, his virtue. This is so not only owing to the reward which is assured to virtue in this world and the next, but the just man would be absolutely happier than the unjust if he were treated by gods and men like the unjust, and the unjust received the reward of the just. To do injustice is worse than to suffer injustice; and to be punished for a misdeed is better than to go unpunished. For as being the beauty and health of the soul, virtue is at once happiness; it brings its reward with it as vice brings its punishment. It is the rule of the divine in men over the animal, and as such the only thing which makes us free and rich, and assures us lasting peace and repose of mind ('Gorg.' 504 A ff.; 'Rep.' i. 353 A ff., iv. 443 C ff., ix. 583 B ff., x. 609 B ff., 'Theæt.' 177 B ff. &c.)

In his theory of virtue, Plato at first adhered closely to Socrates. Ordinary virtue he does not recognise as virtue at all, because it is not founded on insight, but, on the contrary, he reduces all virtues to insight, and maintains that not only are they one, but they can be taught. This view is found in the 'Laches,' 'Charmides,' and 'Protagoras' (cf. p. 137). But even in the 'Meno' (96 D ff.) he allows that besides knowledge right presentation can incite us to virtue, and in the 'Republic' (ii. 376 E, iii. 401 B f., 410 B ff.) he recognises in this incomplete virtue, which rests merely on habit and right presentation, the indispensable preparation for the higher virtue which is founded on scientific knowledge. But now he not only allows that the capacities for

morality, the quiet and eager temperament (*σωφροσύνη* and *ἀνδρεία*, 'Polit.' 306 f.), sensuality, force of will, and power of thought ('Rep.' iii. 415, iv. 435 E, vi. 487 A) are unequally apportioned in individuals and whole nations, but his psychology makes it also possible for him to combine a plurality of virtues with the unity of virtue, inasmuch as he assigns to each of the principal virtues a special place in the soul. Of these principal virtues he enumerates four, which he is the first to establish and explain, just as the number also appears to have been first fixed by him. Wisdom consists in the right quality of the reason. When the spirit maintains the decision of the reason on that which is or is not to be feared, and against pleasure and pain, we have courage; self-control (*σωφροσύνη*) means the harmony of all the parts of the soul on the question which is to command and which is to obey; and justice is the whole extent of this relation, when every part of the soul fulfils its mission and does not overstep it ('Rep.' iv. 441 C ff.). Plato has not attempted to develop this scheme into a complete system of ethics: in his occasional expressions on moral activities and duties he puts the ethics of his people before us in its noblest form; and if he sometimes goes beyond it, as in forbidding us to do evil to an enemy, yet in other respects, as in his conception of marriage, his contempt of manual labour, and his recognition of slavery, he is unable to break through its fetters.

§ 48. *Plato's Politics.*

It is a truly Hellenic trait in Plato's Ethics that they are closely connected with his Politics. But while the old Greek conception allows moral duties to pass almost entirely into political, Plato, on the contrary, carries back political duties to moral. He is convinced with Socrates that man should labour first for himself, and only in the second place for the community ('Symp.' 216 A). Under existing circumstances he finds no room for the philosopher to take a part in politics ('Rep.' 488 A ff.), and even in the ideal State he regards such participation as a sacrifice which he offers to the community ('Rep.' 519 C ff., 347 A f., 500 B). The civic life is as a rule mainly necessary because it is the only means to maintain virtue in the world and raise it to the sovereign place ('Rep.' 490 E ff.). Thus the essential object of this life is virtue, and the happiness of the citizens; its chief mission is the education of the people in virtue ('Gorg.' 464 B f., 521 D ff.; 'Polit.' 309 C, 'Rep.' 500 D, &c.). Though in the first instance it arises out of physical needs ('Rep.' 369 B ff.) a society which was limited to the satisfaction of those needs (like the 'natural state' of the Cynics) does not deserve the name of a State ('Rep.' 372 D; 'Polit.' 272 B). All true virtue rests in scientific knowledge and philosophy. Thus the first condition of every sound polity is the dominion of philosophy, or, which comes to the same thing, the rule of the philosopher ('Rep.' 473 C; 'Polit.' 293 C). This rule must be absolute and

can only be entrusted to the few who are capable of it, for philosophy is not a matter for the multitude ('Polit.' 293 A; 'Rep.' 428 D). The constitution of the Platonic State is therefore an aristocracy, the absolute rule of the competent persons, or philosophers, restrained by no law ('Rep.' 428 E, 433 ff.; 'Polit.' 294 A ff., 297 A ff.). In order to give the ruling order the necessary power, and to protect the State externally, the order of warriors (*φύλακες, ἐπίκουροι*) must be added to it as a second; while the mass of the population, the agriculturists, and artisans, form a third order excluded from all political activity and confined to the acquisition of money ('Rep.' 373 D ff.). This separation of orders Plato founds on the principle of the division of labour, but its special motive lies in the conviction that only a minority are capable of cultivation for the higher political functions; and inasmuch as he also presupposes (Rep. 415 f.) that the capacity for these functions is as a rule hereditary, the division of the three orders approaches to a distinction of castes. Plato himself compares them to the three parts of the soul, and apportions the virtues of the community to them, as he had apportioned the virtues of the individual to the three parts of the soul (427 D ff.). But in order that the two higher classes may discharge their mission satisfactorily (the aristocratic philosopher cares little for the third order and its banausic arrangements) their education and the arrangements of their life must be entirely conducted by the State, and directed to its aims. The State takes care that the citizens shall be begotten by the best parents under

the most favourable circumstances; it gives them by music (cf. p. 162) and gymnastic an education, in which even the women participate, just as they subsequently share in civic and martial duties. It trains the future governors by mathematical sciences and dialectic for their duties, in order that after many years of practical activity, when they have been approved on every side, they may in their fiftieth year be adopted into the highest order, the members of which conduct the management of the State in succession. For the rest of their lives they are compelled to belong wholly to this order, for by the removal of private property, and the family, the State cuts asunder the roots of those private interests which are the hereditary foes of the unity of the State. That Plato is quite in earnest with these proposals, and regards them not only as wholesome but as capable of being carried out, is beyond a doubt. All other kinds of constitution, except his own, he regards as perversions (he enumerates six in 'Pol.' 300 ff., and four in 'Rep.' viii., ix.; cf. 'Rep.' 449 A, &c.). This State cannot be explained merely by the pattern of Spartan or Pythagorean arrangements, or by opposition to the excesses of the Attic democracy; the ultimate basis lies in the fact that the whole character of his system prevents the philosopher from seeing in the sensual and individual side of human existence anything more than a hindrance to true morality, and from regarding it as the means of realising the idea.

§ 49. *Plato's Views on Religion and Art.*

Plato's attitude towards the religion and art of his nation is also determined by moral and political points of view. In an age when poets were theologians, and their works took the place of revealed documents—when the theatre bore an important part in religious worship —art and religion stood in the closest interconnection. Plato's own religion is that philosophic monotheism, in which the Deity coincides with the idea of good, the belief in providence with the conviction that the world is the work of reason and the copy of the idea, while divine worship is one with virtue and knowledge. His more popular utterances about God or the gods are conceived in the same sense. In regard to his belief in providence more especially and in his theory of divine justice, they pass the more easily beyond the strict consistency of his system, because he never critically compared the form of that belief in conception and in presentation, and, above all, had never raised the question of the personality of God. Besides the deity in the absolute sense we find the ideas denoted as eternal gods, the Cosmos and the stars as visible gods, while the philosopher does not conceal the fact that he regards the gods of mythology as creatures of imagination ('Tim.' 40 D), and expresses himself very severely on the numerous immoralities of mythology, which are quite unworthy of divine beings ('Rep.' 377 E, &c.). Nevertheless, he wishes to retain the Hellenic religion as that of his State, and Hellenic myths as the first foundation of instruction, though

these are to be purified from any harmful admixture. What he requires is not the expulsion but the reform of the national religion.

Like religion, art is examined by Plato primarily with regard to its ethical effect. Precisely because he is himself a philosophic artist, he cannot properly estimate pure art, which subserves no other object. In the Socratic manner the conception of the beautiful is referred to the conception of the good without any more subtle analysis of its peculiar nature. He regards art as an imitation (*μίμησις*), not of the essence of things, but of their appearance to the senses; and his objection to it is that, though it arises from a dim enthusiasm (*μανία*), it claims our sympathies equally for what is false or true, bad or good; in many of its productions, as, for instance, in comedy, it flatters the lowest inclinations, and by its varied play endangers simplicity and directness of character. In order to attain to a higher position, art must enter into the service of philosophy, and be treated as a means of moral culture; it must seek its highest mission in emphasising the goodness of virtue and the worthlessness of vice. By this canon the public guidance and supervision is to be directed, to which Plato will subject art, especially poetry and music, down to the minutest details, in his two great political works; and this he himself applies when he banishes from his State not only all immoral and unworthy narratives about gods and heroes, but also all extravagant and effeminate music, and the whole body of imitative poetry, including Homer. In the same manner, Plato

requires that rhetoric, the ordinary practice of which is most emphatically condemned, shall be reformed and made a help to philosophy (cf. p. 138).

§ 50. *The later Form of the Platonic Doctrine. The 'Laws.'*

The system which is set before us in the Platonic writings down to the 'Timæus' and 'Critias' underwent considerable changes in the later part of Plato's life, perhaps after his return from his last Sicilian journey. According to Aristotle, Plato, when he heard him, confined the circle of ideas to the various kinds of natural objects. The ideas he denoted as numbers (p. 143), but distinguished these ideal numbers from the mathematical by the fact that the former do not consist of homogeneous unities, and therefore cannot be reckoned. From the ideal numbers proceed the ideal magnitudes, from the mathematical the mathematical magnitudes, mathematics occupying a place intermediate between the ideas and things in the world of sense (p. 149). Moreover, he did not now content himself with finding the ultimate basis of phenomena in ideas, but inquired into the constituent elements of the ideas (στοιχεῖα). These he found in the One, which he placed on the same level as the good, and the Unlimited, which he called the great and small (μέγα καὶ μικρόν), because it is not limited upwards or downwards, and plurality or 'undefined duality,' in as much as numbers arise from it. But in what relation the unlimited element stood to that which is the

basis of the corporeal world he does not seem to have inquired, and thus arose the appearance of its complete uniformity which Aristotle assumes.[1] Like the Pythagoreans, to whom he approaches in these doctrines, he distinguished the Æther as a fifth body from the four elements.

In the years to which this form of his doctrine belongs, Plato made the attempt in his 'Laws' (cf. p. 131) to show how an essential improvement of political conditions could be brought about even under existing circumstances and without the hypotheses of the philosophical State, which he now thought it impossible to carry out. The dominion of philosophy, which in the 'Republic' is the only means of assisting humanity, is now abandoned; in the place of the philosophical rulers, we have a board of the Wisest without definite magisterial duties; and in the place of dialectic or scientific knowledge of laws we have mathematics and religion. This religion, it is true, is in harmony with Plato's principles, but it does not in any respect go beyond that improved and purified natural religion which in the 'Republic' is merely assigned to the masses as a compensation for dialectic. Nor can the conduct of the individual soul be handed over to wisdom in the higher sense. Its place is taken by practical insight (φρόνησις), which is hardly distinguished from Sophrosyne, while bravery is remarkably depreciated in comparison with both. Finally, in regard to th

[1] The chief passages in Aristotle are *Metaph.* i. 6, 9, xiii. 6, on which compare Alexander's commentary. Further, *Plato and the older Academy*, 517 ff. *Plato Studien*, 217 ff., and Süsemih *Genet. Entwickl. d. Plat. Phi* 509 ff., 532 ff.

arrangements of the State, Plato in his later work does not abolish private property, but contents himself with limiting it by law, and retaining a fixed number of plots of land (5040); he does not now destroy the family, but carefully supervises marriages and domestic life. The principle of one public education for boys and girls alike is still maintained, and intercourse with foreign countries is carefully controlled and limited. Trade, business, and agriculture are the exclusive care of the metœci and slaves, so that of the three orders of the republic only the second remains. As to the constitution of the State, an equal combination of monarchical, or more properly oligarchical, and democratic elements is made the basis, while the organic regulations of the constitution, no less than the civic and penal laws, are carried out wisely and well with a solicitude which extends to the smallest details. Every law is preceded by an explanatory preamble, for men are not required to act out of blind obedience, but from their own conviction.

§ 51. *The Old Academy.*

The scientific society which Plato founded and conducted was carried on, after his death, in his Academy under special leaders, and it gave to succeeding ages the pattern for the organisation of scientific instruction. His first successor was Speusippus, the son of his sister, who was followed in 339 B.C. by his fellow-pupil Xenocrates of Chalcedon. Among the other immediate pupils of Plato, the best known, excluding Aristotle, are Heraclides of Pontus, Philippus of Opus, Hestiæus of

Perinthus, Menedemus the Pyrrhæan. So far as we are acquainted with their views, all these men, adhering to Pythagoreanism, followed the direction which Plato's philosophy had taken in his latest period. Speusippus appears not only to have ascribed a greater value to knowledge gained by experience than Plato (*ἐπιστημονικὴ αἴσθησις*), but he entirely gave up in its Platonic form the doctrine in which Plato had come forward in the most diametrical opposition to the ordinary modes of presentation, by putting mathematical numbers in the place of ideas. These numbers he regards as separate from things; and a fragment of his on the 'Decas' has quite a Pythagorean ring. Like Pythagoras, he denoted the unit and plurality as the most general sources of things; but he distinguished the unit from the creative reason, which he conceived as the world-soul, and appears to have combined with the Pythagorean central fire, and from the Good, which was a result arising from the arrangement of the world. In the first instance he derived only the numbers from unity and plurality; while for superficial magnitudes and for the soul he assumed analogous principles; but it is at the same time recorded (Diog. iv. 2) that he combined the mathematical sciences closely together. With the Pythagoreans (and Plato) he added Æther to the four elements, and, perhaps for the sake of the migration of souls, he allowed the lower parts of the soul to continue beyond death. In his 'Ethics' he followed the Platonic model, merely going beyond it in directly maintaining that pleasure was an evil.

Xenocrates did not go quite so far in his approxi-

mation to Pythagoreanism. He was a man of pure and noble character, but of melancholy humour, a copious author, and, without doubt, the chief representative of the Academic school, which he conducted till 313–4 B.C. He expressly distinguished the three chief parts of the philosophic system — dialectic, physics, and ethics—and was apparently the first to do so. In Pythagorean fashion he denoted as original sources the unit, or the odd, and the indefinite duality, or even, or, as he also expressed it, the father and the mother of the gods, inasmuch as he assimilated the unit to Nous or Zeus. Their first offspring were the ideas, which must be also mathematical numbers. In order to derive magnitudes from numbers, he assumes the most minute and indivisible lines. By the addition of the Same and the Other to number arises the (world) soul, which Xenocrates (on the ground of the 'Timæus') defined as a number moving itself; but this origin of the soul he did not conceive as taking place in time, in which he was apparently influenced by Aristotle. The forces operating in the different parts of the world, in the sky, the elements, &c., he seems to have denoted as gods; by the side of them he assumed, with the national religion and the Pythagoreans, the existence of good and evil spirits. The elements, to which he also added Æther, he assumed to have arisen out of the smallest corpuscles. Like Speusippus, he allows the irrational parts of the human soul, and perhaps the souls of animals also, to survive death. He discouraged a meat diet because by that means the brute nature of animals might obtain an influence over us.

His ethical views were set forth in numerous treatises, and what we know of them shows that he remained true to the Platonic ethics. He placed happiness in 'the possession of virtue and of the means which subserve it.' He distinguished more precisely than Plato between scientific and practical insight, and, like Aristotle, gives the name of wisdom to the first only.

If we may judge from the Pseudo-Platonic 'Epinomis,' which was most probably his work, Philippus was rather a mathematician than a philosopher. In his view mathematics and astronomy secure us the highest knowledge: wisdom consists in acquaintance with them, and on them, combined with correct presentations about the heavenly deities, all piety depends. He follows Plato in rejecting the gods of mythology; and on this account spirits are of the more importance in his eyes as the intermediaries in all intercourse with the gods. He divides them into three classes. On the other hand, he has but a poor opinion of human life and earthly things; and apparently he first interpolated into the 'Laws' (x. 896 E ff.) the bad world-soul (988 D f.). It is by mathematics and astronomy, in addition to virtue, that we are raised above the misery of earthly existence and assured of a future return to heaven. The famous Eudoxus of Cnidus, who was also a mathematician, deviated far more than Philippus from the doctrine of Plato, whom he, like Archytas, had attended. He not only allowed the ideas to be mingled as matter in things, but he declared pleasure to be the highest good. Heracleides of Pontus, who opened a school of his own in his native

city about 339 B.C., borrowed from the Pythagorean Ecphantus not only the assumption of small original corpuscles (*ἄναρμοι ὄγκοι*) out of which the divine intellect built the world, but also the doctrine of the daily revolution of the earth. The soul he regarded as composed of æthereal matter. We are also reminded of the Pythagoreans in the credulity with which this learned but uncritical writer accepted a belief in miracles and soothsaying. Of Hestiæus we know that he busied himself with those metaphysical and mathematical speculations, of which Aristotle preserves a few, in addition to those quoted, without any mention of names.

The successor of Xenocrates, Polemo the Athenian (died 270 B.C.) was held in repute as a moral philosopher. His ethical principles, in which he coincided with Xenocrates, were comprehended in the single requirement of a life according to nature. His most distinguished pupil was Crantor of Soli in Cilicia, who also belonged to Xenocrates, and died before Polemo. He was the first commentator on the 'Timæus,' the psychogony in which he did not, like Xenocrates, regard as conceived in time, and also the author of famous ethical writings entirely in harmony with the doctrines of the Old Academy. After Polemo, Crates of Athens became the leader of the Academic school, and Arcesilaus (§ 78), the successor of Crates, gave an essentially altered character to its doctrines.

IV. Aristotle and the Peripatetic School.

§ 52. *Aristotle's Life.*

Aristotle was born at Stagira, Ol. 90, 1 (384 B.C.). His father Nicomachus was physician to Amyntas, King of Macedonia, but after the death of his parents Proxenus of Atarneus attended to his education. In his eighteenth year, 366–7 B.C., he came to Athens and entered the circle of the pupils of Plato, where he continued till Plato's death. This fact, combined with other ascertained data, is a sufficient contradiction of the assertion that Aristotle's disregard for his teacher and his ingratitude caused a difference between them for a long time before Plato's death. On the contrary, we may assume that Aristotle, during his twenty years of study at Athens, not only studied the pre-Platonic philosophy, but also laid the foundation for other historical knowledge. If in a series of writings he adhered to Plato in form and contents, he nevertheless expressed in them his objections to the doctrines of ideas and his conviction of the eternity of the world. After Plato's death he repaired with Xenocrates to Atarneus in Mysia, to his fellow-pupil Hermias, the prince of that state, whose niece, or sister, Pythias, he subsequently married. Three years later, after the fall of Hermias, he went on to Mitylene. Thence he appears to have returned to Athens, where he opened a school of rhetoric, in opposition to Isocrates. In 342 he obeyed a summons to the Macedonian court to undertake the education of Alexander, who at that time was

on the threshold of his youth (born in 356 B.C.). Here he remained till Alexander set out on his Asiatic campaign. The beneficial influence of the philosopher on his brilliant pupil, and the respect of the pupil for his master, are celebrated by Plutarch, 'Alexander,' c. 8. Aristotle had to thank the favour of Philip or Alexander for the restoration of his paternal city, which Philip had destroyed. In the year 334 or 335 at the earliest, Aristotle returned to Athens and opened a school in the Lyceum which received the name of the Peripatetic, not from the place, but from Aristotle's habit of walking while giving instruction. His teaching extended to rhetoric as well as philosophy; besides continuous lectures, dialogue was doubtless introduced, and the scientific society, like that of Plato, was at the same time a circle of friends with fixed common meals. With ample means of his own, and secure of royal assistance if he required it (apart from any later exaggerations), Aristotle was in a position to obtain all the assistance in his researches which his age could offer. Above all, he was the first to make a large collection of books. His writings are evidence of the extent to which he availed himself of these means. After the violent death of his nephew Callisthenes Aristotle's relations to Alexander were less harmonious; but it is sheer calumny to ascribe to him a part in the supposed poisoning of Alexander, which is indeed a party falsehood. The unexpected death of the king brought him into the most immediate danger, for on the outbreak of the Lamian war he was attacked on a false charge of sacrilege, owing to political hatred, and fled

to Chalcis in Eubœa, where he fell sick and died in the summer of 322 B.C., a few months before Demosthenes. His character, which from a very early period was grievously traduced by his political and scientific opponents, appears in his writings as thoroughly noble, and there are no certain facts which give us any reason to doubt this impression. His scientific eminence is beyond a doubt; and in the combination of an extraordinarily wide knowledge with independent judgment, acute penetration, comprehensive speculation, and methodical inquiry, he stands alone, or if not alone, Leibnitz only can be compared with him in this respect.

§ 53. *Aristotle's Writings.*

Under the name of Aristotle a collection of writings has come down to us, which in all essentials undoubtedly goes back to the edition of the Aristotelian writings published by Andronicus about 50–60 B.C. (Cf. § 82.) There is no doubt that the largest and most important part of these writings is genuine, though some of them are apparently not free from later additions and alterations. But besides the works which have survived we are acquainted with a large number of lost writings—of which, it is true, the greater part seem to be spurious—partly from the quotations of later writers, and partly from two lists which are still in existence. The older of these lists,[1] which seems to have been derived from the Alexandrian Hermippus

[1] In Diog. v. 21 ff. and with several omissions and additions in the so-called *Anonymus Menagii*, a biography of Aristotle, apparently the work of Hesychius (about 500 A.D.)

(about 200 B.C.), puts the total of the Aristotelian writings at nearly 400 books; but as important works in our collection are not found in the list, it seems only to contain the works of Aristotle which were in the Alexandrian Library at the time of its compilation. The later list, which has come down to us in an incomplete state from Arabian writers, was compiled by Ptolemæus, apparently a Peripatetic of the first or second century A.D. It mentions nearly all the works in our collection, and (with Andronicus) reckons the books of the entire writings at 1,000.

Our collection contains the following works:

(1) *Logical Treatises* (first collected together in Byzantine times under the title 'Organon'): 'The Categories,' apparently mutilated from c. 9, 11 b. 7, and enlarged by the addition of the so-called Post-predicaments, c. 10–15, from a later hand; *π. ἑρμηνείας* (or on propositions), probably the work of a Peripatetic of the third century B.C.; the two 'Analytics' (*ἀναλυτικὰ πρότερα* and *ὕστερα*), of which the first deals with conclusions, the second with proof; the 'Topica,' which treats of dialectic, *i.e.* the art of the proof of probability; the last (ninth) book is generally quoted as a separate treatise, *π. σοφιστικῶν ἐλέγχων.*

(2) *Treatises on Natural History*: 'Physics' (*φυσικὴ ἀκρόασις*), in eight books, of which, however, the seventh book, though derived from an Aristotelian sketch, appears to be a later interpolation; 'De Cælo,' four books; 'About Origin and Decay,' two books; 'Meteorology,' four books; the spurious book *περὶ κόσμου* (see § 82). There are also the investigations

into the nature of living creatures, the three books on the soul, and the smaller treatises connected with them, from which we must separate the work *περὶ πνεύματος* as post-Aristotelian; the comprehensive zoological treatises; the description of animals (*π. τὰ ζῶα ἱστορίαι*) in ten books, or nine, if we deduct the spurious tenth book; and the three systematic works: 'On the Parts of Animals,' four books; 'On the Progression of Animals;' 'On the Origin of Animals' (five books, of which, however, the fifth book seems to be a separate work), together with the spurious treatise *περὶ ζώων κίνησεως*. Whether Aristotle carried out a work which he contemplated on plants is not quite certain; in any case the treatise *π. φυτῶν*, which we have, is spurious. So also are the works *π. χρωμάτων*, *π. ἀκουστῶν*, *π. θαυμασίων ἀκουσμάτων*, the *φυσιογνωμικά*, the *μηχανικά*, and the treatise on indivisible lines (probably the work of Theophrastus). Aristotle also wrote 'Problems,' but in our thirty-seven books of problems the remains of the Aristotelian are buried beneath a mass of later additions.

(3) The metaphysical writings of the philosopher which we possess are limited to the 'Metaphysics' (*τὰ μετὰ τὰ φυσικά*),[1] which, so far as we can see, is a collection formed immediately after Aristotle's death of all that was found in his remains referring to the 'first philosophy' (cf. § 54); its present name is due to its position in the collection of Andronicus. The bulk of it (b. i. iii. [B.], iv. vi.—ix. x.) is formed by Ari-

[1] Best editions and commentaries by Bonitz (1848) and Schwegler (1847 f.)

stotle's incomplete work on the 'First Philosophy,' in which the originally independent treatise which forms book v. has been incorporated. Book xi. 1—8, 1065 a. 26, seems to be an older sketch which was changed afterwards into books iii. iv. vi. Books xiii. xiv. are discussions which were at first intended for one work, but subsequently rejected and in part embodied in books i. 6, 9. Book xii. is a separate treatise written before the main work, perhaps as a basis for lectures. Books ii. (*a*) and xi. (from c. 8, 1065 a. 26) are confessedly spurious. The same is the case with the treatises on the Eleatic philosophy mentioned on p. 58.

(4) *Ethics* are treated by Aristotle in the ten books of the so-called 'Nicomachean Ethics,' in books v.–vii. of which additions greater or smaller seem to proceed from the Eudemian; and *Politics* in the eight books of the 'Politics.' In the last-mentioned work not only do books vii. and viii. find their proper place between books iii. and iv., but much that is needed to complete the plan is wanting. Like the 'Metaphysics,' it seems to have been left a fragment owing to the death of the author. The 'Eudemian Ethics' are a revision of the 'Aristotelian Ethics' by Eudemus, but of this only books i.–iii. and vi. are preserved; the 'Magna Moralia' are a sketch compiled from both, but more especially from the Eudemian. The small treatise on 'Virtues and Vices' belongs to the period of later eclecticism. The first book of the 'Œconomics,' which Philodemus ('De Vitiis,' col. 7, 27) ascribes to Theophrastus, is certainly not Aristotelian, and the second book is much later.

(5) On *Rhetoric* we have the three books of the 'Rhetoric,' of which, however, the third does not seem to be the work of Aristotle; on *Poetry* we have the Poetics, which as it now stands is only a part of an Aristotelian work in two books. The 'Rhetoric to Alexander' is an interpolation.

All these treatises, so far as they are genuine, and unless intended by their author for his own private use, as was perhaps the case with 'Metaphysics' xii., appear to have been didactic works which Aristotle wrote down for his pupils and imparted to them only. He seems to have had no thought of wider publication, and perhaps at first did not permit it. This is the conclusion we draw from the quotation of 'published works' (see *infra*), and more especially from the address to his pupils at the end of the 'Topica,' and from the numerous facts which show that the last hand of the author was wanting. Moreover, in some treatises which are demonstrably earlier in date, we find reference to later writings, which appear to have been added long after they were composed, but before they were published. Of the lost works the 'Ανατομαί, so often quoted by Aristotle himself, and the ἀστρολογικὰ θεωρήματα ('Meteor.' i. 3, 8. 339 b. 7. 345 b. 1. 'De Cælo,' ii. 10, 291 a. 29), besides the work on plants, belonged to these didactic treatises; of the numerous other writings of the class, which are still mentioned, perhaps no single one was genuine.

From the didactic writings of the Aristotelian school we must separate those which Aristotle himself calls 'published' works ('Poetics,' 15, 1454 b. 17,

ἐκδεδομένοι), and which apparently he means by the λόγοι ἐν κοινῷ γιγνόμενοι ('De An.' i. 4, *init.*), and possibly by the ἐγκύκλια φιλοσοφήματα ('De Cælo,' ii. 9, 279 a. 30; 'Eth.' i. 3, 1096 a. 2).[1] Of these, however, none is expressly quoted in the books in existence, which are proved to be a connected whole by the numerous cross-references in them. All the writings of this class appear to have been composed before Aristotle's last residence in Athens; a part of them were in the form of dialogue, and it can only be in reference to them that Aristotle is commended by Cicero and others for the copiousness and charm of his exposition, the 'golden stream of his speech.' Even among these there was at an early time much that was spurious.[2] Among the dialogues was the 'Eudemus,' which in form and contents was an imitation of Plato's 'Phædo,' and was apparently composed in 352 B.C.; the three books on Philosophy, in which the criticism of the doctrine of ideas begins; the four books on justice; the three books περὶ ποιητῶν. The remaining writings of the earlier period contained the 'Protrepticus,' the treatises on the Ideas and the Good, and accounts of the contents of the Platonic lectures, the 'History of Rhetoric' (τεχνῶν συναγωγή), the 'Rhetoric,' dedicated to Theodectes, which, like the treatise περὶ βασιλείας,

[1] It is, however, doubtful whether the old commentators are right in referring, after Andronicus, the ἐξωτερικοὶ λόγοι, so often mentioned by Aristotle and Eudemus, to a particular class of Aristotelian writings. Bernays, with most scholars, defends this view. Diels attacks it: *Sitzungsber. d. Berl. Akad.* 1883; Nr. 19.

[2] The remains have been collected by Rose in his *Aristoteles Pseudepigraphus*, and the Berlin edition of Aristotle, p. 1474 ff., by Heitz, vol. iv. b. of Didot's edition.

dedicated to Alexander, must have been composed in Macedonia; and the *διδασκαλίαι*, besides which many works relating to poets and arts are mentioned—whether with good reason is very doubtful. On the other hand, the excerpts from some Platonic works, and the writings on the Pythagoreans and other philosophers, so far as they are genuine, are only sketches for private use, and the same is probably the case (as Heitz assumes) with the 'Polities,' a collection of accounts of 158 Hellenic and barbarian cities from which numerous statements are preserved, the *νόμιμα βαρβαρικά* and *δικαιώματα τῶν πόλεων*.

How many of the Letters, which had been collected in eight books by Artemon even before Andronicus, are genuine, cannot be ascertained; in what we know of the collection, there is much that is obviously interpolated, besides a good deal that may be genuine. We have no reason to doubt the genuineness of some small poems and fragments.

As all or nearly all the didactic writings of Aristotle appear to have been composed in the last twelve years before his death, and present his system in the ripest form without any important variation in contents or terminology, the question of the order of composition becomes of little practical importance. Yet it is probable that the 'Categories,' the 'Topica,' and the 'Analytics' are the oldest parts of our collection; these were followed by the 'Physics' and the works which are connected with them. Next in order are the treatises on the soul and living creatures; then the 'Ethics.' The 'Politics' and 'Metaphysics' (with the exception of the older

portions incorporated in them) were then commenced, but never completed, while the 'Poetics' and 'Rhetoric,' though begun later, were finished. The narrative given in Strabo (xiii. 1. 54) and Plutarch 'Sulla,' 26), according to which the writings of Aristotle and Theophrastus were carried to Neleus at Scepsis after the death of Theophrastus, and there hidden in a cellar, rediscovered by Apellicon in Sulla's time, brought by Sulla to Rome, and republished by Tyrannio and Andronicus, may be correct in the facts. But if it is presupposed in consequence that the Peripatetics after the time of Theophrastus were acquainted with but few and those for the most part exoteric works of their founder, the assumption is not only improbable in itself, but contradicted by the fact that the use of all the works of Aristotle with unimportant exceptions can be proved for the period between Theophrastus and Andronicus, notwithstanding the fragmentary character of the literary tradition of this period.

§ 54. *The Philosophy of Aristotle.*

Introductory.

Aristotle considered himself a member of the school of Plato, and sharply as he contested the doctrine of its founder in many points, more especially in the central point of the doctrine of ideas, yet his whole philosophy is far more deeply and completely defined by its connection with Plato than by its opposition to him. It is true that he limits philosophy more exclusively than Plato to the region of science, and dis-

tinguishes it more distinctly from moral activity, while on the other hand he assigns a greater importance for philosophy to empiric knowledge. Yet he, like Plato, places the peculiar mission of philosophy in the knowledge of unchangeable Being and the ultimate bases of things, the general and necessary. This essence of things, the true and original real, he finds with Plato in the forms (εἴδη), which make up the content of our concepts. Hence his philosophy, like that of Socrates and Plato, is a science of concepts; the individual is to be referred to general concepts, and explained by derivation from concepts. Aristotle has brought this process to the highest state of perfection, both in the direction of dialectical induction and in that of logical demonstration. Excluding all the poetical and mythical adornment, which, following the pattern of Plato, he did not despise in the writings of his youth, he carried it out with scientific severity. By the incisiveness and brevity of his mode of expression, and his extraordinary skill in creating a philosophical terminology, he knew how to gain for his exposition those advantages by which it is as far in advance of the exposition of Plato, as it is behind Plato in artistic finish, at any rate, in the works which have come down to us. But as the philosopher did not think of the forms as essences existing independently and separate from things, but only as the inner essence of individual things, he combines with the philosophy of concepts such a decided demand for the most comprehensive empiric knowledge, as can only be found at most in Democritus among his predecessors. He is not only a scholar, but a

observer of the first rank, equally eminent for his multifarious knowledge, extending more especially to the earlier philosophers, for his comprehensive knowledge of nature, and his penetrating researches, though it is obvious that we must not expect from him what could only be obtained by the scientific aids and methods of our own century.

The indications which Aristotle gives for the division of the philosophic system can only be with difficulty applied to the contents of his own writings. He distinguishes three sciences—theoretic, practical, and productive. Under the first are included Physics, Mathematics, and the 'First Philosophy' ('Metaphysics,' cf. p. 174), which is also called Theology; practical philosophy is divided into Ethics and Politics, but the whole is also called Politics. For our purpose it is best to make the division into Logic, Metaphysics, Physics, and Ethics, the chief basis of our exposition of the Aristotelian system, and to add something by way of supplement to these main divisions.

§ 55. *The Aristotelian Logic.*

Aristotle has created Logic as a special science on the foundation laid by Socrates and Plato. He calls it Analytic, *i.e.* the introduction to the art of investigation, and treats it as scientific methodology. According to his view, scientific knowledge in the narrower sense (ἐπιστήμη) consists in the derivation of the special from the general, the conditioned from its causes. But the development of knowledge in time takes the reverse path. Though the soul in its thinking nature possesses

the possibility of all knowledge, and to that extent is dynamically possessed of all knowledge, it attains to actual knowledge by degrees only. What is the better known and more certain in itself is not so for us ('Anal. Post.' i. 2, 71 b. 33; 'Phys.' i. 1, 184 a. 16); we must abstract the general concepts from the individual observations, and rise by steps from perception by means of memory to experience, and from experience to knowledge ('Anal. Post.' ii. 19; 'Metaph.' i. 1, &c.), and it is owing to this importance of experience for knowledge that Aristotle expressly undertakes the defence of the truth of sensuous perception. He is of opinion that the senses as such never deceive us; all error springs out of the false reference and combination of their evidence. Hence the Aristotelian Logic (in the 'Second Analytics') deals with induction as well as proof; but both are preceded (in the 'First Analytics') by the doctrine of the syllogism, which is the form common to both. It is only in connection with the syllogism that Aristotle deals with concepts and judgments.

A syllogism is 'a speech, in which from certain presuppositions there arises something new' ('Anal. Prior.' i. 1, 24 b. 18). These presuppositions are expressed in the premisses, and therefore in propositions (both are called *πρότασις* by Aristotle). A proposition consists in an affirmation or negative assertion, and is therefore composed of two concepts (*ὅροι*), a subject and a predicate. Nevertheless Aristotle only treats concepts more at length in connection with the doctrine of the definition of the concept, as part of his metaphysical inquiries. In the proposition or judgment (*ἀπόφανσις*),

he thinks only of the categorical judgments, which he divides according to their quality (now so called) into affirmative or negative, according to their quantity into general, particular, and indefinite (π. ἑρμηνείας, into general, particular, and singular), and according to their modality into assertions about Being, necessary Being, and possible Being. Further, he distinguishes the two kinds of opposition, contradictory (ἀντίφασις) and contrary (ἐναντιότης). He shows what judgments can be converted simply, and what require change in their quantity. Finally he remarks that from the combination of concepts in a judgment arises the contrast of true and false. But the doctrine of the syllogism forms the chief contents of this part of his Logic. Aristotle was the first to discover in the syllogism the radical form in which all advance of thought moves, and he also gave the name to it. The syllogistic of his 'First Analytics' gives an exhaustive account of the categorical syllogisms in their three figures, of which the second and third receive their validity by being referred to the first. Into hypothetical and disjunctive syllogisms he does not enter.

Proofs are compounded out of syllogisms. The object of all demonstration (ἀπόδειξις) is the derivation of the conditioned from its sources, in which (see *supra*) knowledge as such consists. The presuppositions of a proof must therefore consist of necessary and universal propositions; and a complete demonstration (a complete science) is only realised when that which has to be proved is derived through all the intermediary members from its highest presuppositions.

Such a derivation would not be possible if the suppositions, from which it starts, were in turn derivative, and so *ad infinitum*, or if there were an endless series of intermediate members between the presuppositions and that which has to be derived from them.

All mediate knowledge, therefore, presupposes an immediate, which in more precise terms is twofold. Both the most general principles from which the demonstration proceeds, and the actual fact to which the principles are applied, must be known to us without proof; and if the facts are known to us by perception in a direct manner, Aristotle recognises in reason (*νοῦς*) the power of direct, intuitive, and therefore unerring knowledge of the most general principles. Whether these principles are merely formal, or whether concepts with a definite content (as possibly the concept of the Deity) can be known in this manner, Aristotle did not inquire. He regards the rule of contradiction, for which he establishes different formulæ in its logical and its metaphysical form though they agree in fact, as the highest and most certain principle of human thought. That even these convictions may not be without a scientific foundation, he introduces into them *induction* (*ἐπαγωγή*) in the place of proof. Induction emphasises a general definition, inasmuch as it shows that it actually holds good of all the individual cases brought under it. But as a complete observation of all individual cases is never possible, Aristotle looks round for a simplification of the inductive process. Following the pattern of Socrates, he establishes induction on those assumptions which, owing to the number

or the authority of their supporters, may be supposed to have arisen out of actual experience (ἔνδοξα). By the dialectic comparison and examination of these assumptions, he endeavours to obtain correct definitions. He has applied this process with singular ability and wisdom in the ἀπορίαι with which it is his habit to open every inquiry; and though it is true that in his observation we miss the accuracy and completeness, and in his use of the statements of others, the criticism, which we are now accustomed to require, yet even in this respect he has done everything which can be reasonably expected from one in his position and with the aids to scientific research which his time afforded.

The fixing of concepts or definition (ὁρισμός) rests in part on direct knowledge, which must be emphasised by induction. If all our concepts denote something general, which of necessity and always is attached to the things of a particular class, the concept in the narrower sense, in which it is the object of definition, denotes the essence of things,[1] their form, irrespective of their matter, the elements which make them what they are. If such a concept expresses that which is common to many things different in kind, it is a generic concept (γένος). When the specific difference (διαφορὰ εἰδοποιός) is added to the genus, the result is the species (εἶδος). When this has been more closely defined by further distinctive marks, and this process has been continued as long as possible, we obtain the

[1] οὐσία, εἶδος, τὸ τί ἐστι, τὸ added (as τὸ ἀνθρώπῳ εἶναι), τὸ τί ἦν ἐστι, τὸ ὅπερ ὄν, τὸ εἶναι with a dative ἦν εἶναι.

lowest specific concepts, which cannot now be divided into species but only into individuals, and these make up the concepts of every object ('Anal. Post.' ii. 13). Hence the definition of the concept must contain the marks which bring about the derivation of its object from its generic concept, not only with completeness, but in a correct order, corresponding to the graduated process from the general to the special. The essential aid for the definition of concepts is an exhaustive definition, proceeding logically. Two things which are furthest removed from one another in the same genus are opposed as contraries (*ἐναντίον*), but two concepts are in contradictory opposition when one is the simple negative of the other (A, non-A). But Aristotle also applies these species of the contradictory to the conceptions of relation, and to those of having and derivation.

All our concepts fall ('Categ.' 4; 'Top.' i. 9) under one or more of the 'main classes of assertions' (*γένη* or *σχήματα τῶν κατηγοριῶν*), or 'Categories' (*κατηγορίαι*), which denote the various points of view from which things may be contemplated, while there is no concept which comprehends them as a class. Of these categories Aristotle enumerates ten: substance, quantity, quality, relation, where, when, place, possession, activity, passivity (*οὐσία* or *τί ἔστι*, *ποσόν*, *ποιόν*, *πρός τι*, *ποῦ*, *ποτέ*, *κεῖσθαι*, *ἔχειν*, *ποιεῖν*, *πάσχειν*). He is convinced of the completeness of this scheme, but no definite principle is to be found for its origin; the categories of possession and place are named in the 'Categories' and the 'Topics,' but passed over in all later enumera-

tions).[1] Of the remainder all have not the same value; the most important are the four first, and among these the category of substance, to which all the rest are related as what is derivative to what is primary. It is these categories which form the essential object of the first philosophy or metaphysics.

§ 56. *Aristotle's Metaphysics.*

This science is concerned with the inquiry into the ultimate basis, with Being as such, with the eternal incorporeal and immovable, which is the cause of all movement and form in the world. It is therefore the most comprehensive and valuable of all sciences. Speaking more precisely, it is concerned with the three questions of the relation of the individual and the Universal, form and matter, the moving and the moved.

1. *The Individual and the Universal.*—Plato will allow only the ideas, the universal, to be the original and bare reality. This forms the content of our concepts, and if he consequently described the ideas as self-existent essences, which are independent of individual things, Aristotle is in harmony with him. He subjects the doctrine of ideas ('Metaph.' i. 9, xiii. 4–10, &c.), and the assumptions connected with it, to the most penetrating and annihilating criticism (in spite of some injustice and inaccuracy). In this criticism the most decisive objections are that the Universal is nothing substantial; that the essence cannot be ex-

[1] *Anal. Post.* i. 22, 83 a. 21 b. 15. *Phys.* v. 1 end. *Met.* v. 1, 1017 a. 24.

ternal to the things of which it is the essence; that ideas do not possess the moving force without which they cannot be the cause of phenomena. On his part he could only regard the individual as the real in the full sense, as a substance (*οὐσία*). For if this name is only given to that which can neither be predicated of another, nor adheres as an accident to another,[1] only the individual nature is substance. All general concepts, on the other hand, express merely certain peculiarities of substances, and even generic concepts only express the common essence of certain substances. They can therefore be called substances in an improper and derivative manner (*δεύτεραι οὐσίαι*), but they must not be regarded as anything existing outside things. They are not a *ἓν παρὰ πολλά*, but a *ἓν κατὰ πολλῶν*. But if the form, which is always something universal in comparison with that which is compounded of form and material, is allowed to have the higher degree of reality (cf. *infra*), and only the general, or that which is in itself earlier and better known, can be the object of knowledge (pp. 180, 182), we have here a contradiction of which the results run through the entire system of Aristotle.

2. However vigorously Aristotle contests the independent and separate existence of the Platonic ideas, he is not inclined to surrender the leading thoughts of the doctrine. His own definitions of form and matter were rather an attempt to carry the subject out in a theory more tenable than that of Plato. The object

[1] *Categ.* 5. *οὐσία δέ ἐστιν . . . λέγεται μήτ' ἐν ὑποκειμένῳ τινί ἢ μήτε καθ' ὑποκειμένου τινὸς ἐστιν.* Cf. c. 2. 1 a. 20 ff.

of knowledge, he says with Plato, can only be the necessary and unchangeable; all that is perceived by the senses is accidental and changeable; it can be and not be (is an *ἐνδεχόμενον καὶ εἶναι καὶ μὴ εἶναι*); only that which is beyond sense and thought in our concepts is as unchangeable as the concepts themselves. Still more important for Aristotle is the assumption that every change presupposes something unchangeable, all Becoming something not in process of becoming; and this something, if we examine it closer, is of a twofold nature—a substratum, which becomes something and upon which the change takes place, and the qualities in the communication of which to the substratum the change consists. The substratum is called by Aristotle the *ὕλη*, an expression coined for the purpose; the qualities are called the form, the *εἶδος*—a word used for the Platonic ideas (also *μορφή*. Other terms are used, see p. 185, *note*). As the object of becoming is attained when the material has assumed its form, the form of a thing is the reality of it, and form generally is reality (*ἐνέργεια*, *ἐντελέχεια*) or the real (*ἐνεργείᾳ ὄν*). As, on the other hand, the material as such is not yet that which it becomes in the result, but must have the capacity to become so, matter is also the possibility or the possible (*δύναμις, δυνάμει ὄν*). If we think of material without form, we get the 'first matter' (*πρώτη ὕλη*), which, being without definition, is also called the (qualitatively) unlimited, the common substratum of all limited matter. Yet as it is what is merely possible, it never existed and never could exist. On the other hand, the forms are

not merely modifications or creations of our most universal form; each is, on the contrary, eternal and unchangeable as that particular form, just as the ideas of Plato, only it is not, like the idea, outside things, and never was, in the eternity of the world. The form is not merely the concept and the essence of each thing, but also its aim and the power which realises that aim. Though these different relations are as a rule apportioned to different subjects, and Aristotle in consequence frequently enumerates four different kinds of cause—the material, the formal, the motive, and the final cause—yet the three last mentioned coincide in their essence, and often in fact in particular cases (as in the relation of the soul to the body and of the Deity to the world). The only original difference is that between the form and the matter. This runs through everything. Wherever one thing is related to another as the more complete, the definite, and operating element, the first is denoted as the form or actual, the second as the matter or potential. But as a fact matter acquires in Aristotle a meaning which goes far beyond the concept of simple possibility. From it arise natural necessity (*ἀνάγκη*) and accident (*αὐτόματον* and *τύχη*), which limit and encroach upon the power which nature and man have of realising their aims. On the quality of matter rests all imperfection of nature, and also differences so vital as the difference between the heavenly and the earthly, the male and the female. It is due to the resistance of matter to form that nature can only rise by degrees from lower forms to higher; and it is only from matter

that Aristotle can explain that the lowest special concepts diverge into a number of individuals. It is obvious that matter thus becomes a second principle beside form, endowed with a power of its own, and however great the advantages which the philosopher derived from his doctrine of form and matter for the explanation of phenomena, we nevertheless find great difficulty in the obscurity which arises from the fact that *οὐσία* is sometimes placed on a par with the individual and sometimes with the form (p. 188).

3. From the relation of form and matter comes the motion, or, what is the same thing, the change to which everything in the world which contains matter is subject. Motion is, in fact, nothing else than the realisation of the possible as such (*ἡ τοῦ δυνάμει ὄντος ἐντελέχεια, ᾗ τοιοῦτον*, 'Phys.' iii. 1, &c.). The impulse to this realisation can only be given by something which is already that which the thing moved will become owing to the movement. Hence every movement presupposes two things—an element moving and an element moved, and even if Being moves itself, both these two elements must be separate in it, as soul and body in men. The moving element can only be the actual or the form; the moved element is the potential or material. The first operates upon the second by rousing it to move towards reality or definiteness of form. From its nature (so far as in every structure there exists a desire for its realisation in use or activity) matter has a desire (*ἐφίεσθαι, ὀρέγεσθαι, ὁρμή*) after the form of the good and divine ('Phys.' i. 9, 192 a. 16, ii. 1, 192 b. 18; 'Metaph.' xii. 7, 1072 b. 3). When

form and matter touch, motion must of necessity always arise. And as not only form and matter, but also the relation of the two on which motion rests, must be eternal (for its origin and decay can only be brought about by motion), as also time and the world, both of which cannot be thought without motion, are without beginning and end (cf. § 57, 58), motion can never have begun and can never cease. The ultimate basis of this eternal movement can only lie in something unmoved. For if all movement arises through the operation of that which moves upon that which is moved, the moving element, as it also is moved, presupposes a separate moving element, and this goes on till we reach a moving cause, which is itself not moved. If, therefore, there were no unmoved moving cause, there could not be such a thing as a first moving cause, and consequently no movement whatever, and still less movement without a beginning. But if the first moving cause is unmoved, it must be immaterial form without matter, or pure actuality. For wherever there is matter there is the possibility of change, the process from the potential to the actual, and movement; it is only the incorporeal which is unchangeable and unmoved. As the form is complete Being, and matter incomplete, the first moving cause must also be the absolutely perfect, or that in which the series of Being comes to an end. Moreover, as the world is a uniform whole, well arranged, and referred to a single end, and the motion of the orb of the world is uniform and continuous, the first moving cause can only be one; it can indeed only be the final object. But the mere

incorporeal being is nothing but thought or spirit (*νοῦς*). Therefore the ultimate basis of all movement lies in the deity as the pure, perfect spirit, infinite in power. The activity of this spirit can only consist in thought; for every other activity (every *πράττειν* and *ποιεῖν*) has its object beyond itself, which is inconceivable in the activity of the perfect, self-sufficient being. This thought can never be in the condition of mere potentiality, it is a ceaseless activity of contemplation (*θεωρία*). It can only be its own object, for the value of thought is in proportion to the value of its contents; but only the divine spirit himself is the most valuable and complete object. Hence the thought of God is the 'thought of thought,' and his happiness consists in this unchangeable contemplation of self. The spirit does not operate on the world by passing from himself and directing his thought and volition towards it, but by his mere existence. As the highest good the simply perfect being is also the final object of all things, that to which everything strives and moves; on it depends the uniform order, the cohesion, and the life of the world. Aristotle has not assumed a divine will directed to the world, or a creative activity of the deity, or an interference of the deity in the course of the world.[1]

[1] The most important passages for the theology of Aristotle are *Phys.* viii. 5. 6. 10; *Metaph.* xii. 6 f., 9 f.; *De Cœlo*, i. 9, 279 a. 17 ff.; *Fragm.* 12–16.

§ 57. *Aristotle's Physics.*

Point of View and General Principles.

If the 'First Philosophy' is concerned with the immovable and incorporeal, the object of physics is the movable and corporeal, and more precisely that which has the source of its movement in itself. 'Nature (*φύσις*) is the source of movement and rest in that in which these are originally found' ('Phys.' ii. 1. 192 b. 20); but how we are to conceive this source more precisely, and what is the relation in which it stands to the deity, remains doubtful. Much as the philosopher is in the habit of treating nature as a real power operating in the world, his system gives him but little right to assume as a substance such a power.

By movement Aristotle (see *supra*) understands in general every change, every realisation of what is possible, and in this sense he enumerates four kinds of movement: substantial, or origin and decay; quantitative, as addition and subtraction; qualitative or alteration (*ἀλλοίωσις*, the transition of one material into another); local (*φορά*, change of place). But only the last three are considered motion in the narrower sense (*κίνησις*), while the conception of change includes all four (*μεταβολή*). All other kinds of change are conditioned by local movement; and Aristotle ('Phys.' iii. iv.) examines more minutely than any of his predecessors the conceptions which were related in the first instance to this kind of movement. He shows that the *unlimited* can only be potential, in

the infinite multiplication of numbers, and the divisibility of magnitudes; it can never be given in reality. He defines *space* (*τόπος*, more rarely *χώρα*) which, however, he does not sharply distinguish from locality, as the limit of the surrounding body towards that which is surrounded, and *time* as the number of motion in regard to what is earlier and later (*ἀριθμὸς κινήσεως κατὰ τὸ πρότερον καὶ ὕστερον*). From this he deduces the fact that beyond the world there is neither time nor space—that empty space (as is stated more at length in opposition to the Atomists) is inconceivable, and that time, like every number, presupposes a numbering soul. He proves (to mention a few things out of many) that movement in space, and, among such movements, movement in a circle, is the only uniform and constant motion, which can be without beginning and end. Yet movement in space, and the mechanical view of nature which corresponds to it, is not sufficient in Aristotle's opinion to explain phenomena. He maintains against it the qualitative difference of matter, and not only contests Plato's mathematical construction of the elements, but also the theory of Atoms, for reasons against which this theory could not be defended in its Democritean form, and in the existing state of physical knowledge. He also assumes, while attacking the opposite theories, a qualitative change of matter, and more especially of the elements, into each other. By this change the qualities of one are changed under the influence of another. This relation of activity and passivity is only possible when two bodies are opposed to each other which are partly similar and partly

dissimilar, *i.e.* when they are opposed within the same genus. In the same spirit Aristotle defends the notion according to which the intermixture of matter consists not merely in combination, but in the formation of a new matter out of that which has been mixed, a notion opposed to the mechanical theories. Still more important for him is the principle that the operation of nature must be universally regarded not merely as physical, but essentially as a striving towards an end. The end of all becoming is the development of potentiality to actuality, the creation of form in matter. Thus the result of the Aristotelian doctrine of form and matter, as of the Platonic doctrine of ideas, is a preponderance of the teleological explanation of nature over the physical. 'Nature,' Aristotle explains, 'does nothing without an aim,' 'she is always striving after the best;' 'she always makes the most beautiful that is possible.' Nothing in nature is superfluous, or in vain, or incomplete; in all her works, even the smallest, there is something divine, and even failures are applied by her, as by a good housewife, to some useful object. That this is the case is shown by the observation of nature, which allows us to perceive a most marvellous design in the arrangement of the world, and in all natural objects, however great or small. We are compelled to refer this design to an all-pervading movement towards an end by the consideration that whatever occurs regularly cannot be the result of accident. If we cannot ascribe reflection to nature this only proves that she, like perfect art, creates what is suitable to her aim with the unerring certainty which excludes choice. Hence the real source of natural

objects lies in final causes; material causes, on the other hand, are regarded by Aristotle, as by Plato (cf. p. 151), as conditions and indispensable aids (ἐξ ὑποθέσεως ἀναγκαῖον, συναίτιον, τὸ οὗ οὐκ ἄνευ τὸ εὖ), but not as the positive causes of objects. But what resistance these intermediate causes make to the teleological activity of nature, how its effects are in consequence limited, so that in the earthly world (for in the heavenly material is of a different species) this activity is forced into a graduated progress from imperfection to perfection, has already been observed (p. 190).

§ 58. *The Universe and its Parts.*

From the eternity of form and matter, together with the absence of all beginning and end in motion (see *supra*, p. 192), follows the eternity of the universe. The assumption that the world, though it has come into being, will last for ever, overlooks the fact that origin and decay mutually condition each other, and that that alone can be imperishable the nature of which excludes both the one and the other. Even in the world of earth it is only individual things which come into being and decay; genera, on the other hand, are without beginning, and hence men have always been in existence, though, as Plato also assumed, the race has been from time to time partly destroyed and partly reduced to savagery over wide districts by great natural catastrophes. Owing to this doctrine of the world which he was the first to establish, and which deeply penetrates into his system, the cosmogonic part of physics is

of little importance for Aristotle. He has not to explain the origin of the world but only its nature.

The foundation of his explanation is the division into the two unequal parts, out of which the universe is composed; the world above and the world below the moon, the heavenly and the earthly world, the Beyond and the Here (*τὰ ἐκεῖ* and *τὰ ἐνταῦθα*). The imperishable nature of the stars and the unchangeable regularity of their motions prove, what Aristotle also attempts to demonstrate on general grounds, that they are distinct in their material from perishable things which are subject to constant change. They consist of æther, the body without opposite, which is capable of change in space only and no other, and has no movement besides circular movement. But things consist of the four elements which stand to one another in a double opposition; the opposition of weight and lightness, which arises from their peculiar direct motion to their natural localities, and the qualitative opposition, which results from the various possible combinations of their original qualities—warm and cold, and dry and moist (fire is warm and dry, air warm and moist, water cold and moist, earth cold and dry). Owing to this opposition they are constantly passing into each other, those that are at a greater distance by the mediation of those that are between them. From this follows, not only the unity of the world, which is also secured by the unity of the *primum mobile*, but also its spherical form, which, however, Aristotle proves on many other physical and metaphysical grounds. In the centre of the world rests the earth, as a proportionately smaller part of it,

which in form is also a sphere; round the earth, in concentric spherical layers, lie water, air, and fire (or more precisely the warm-substance, *ὑπέκκαυμα*, for flame is *ὑπερβολὴ πυρός*); then come the heavenly spheres, of which the material is thought to be purer in proportion to their distance from the earth. The outermost of these spheres is the heaven of the fixed stars (*πρῶτος οὐρανός*), the daily revolution of which is brought about by the deity, which, though occupying no space, surrounds it (cf. p. 195). The movement of every sphere consists in a perfectly even revolution upon its axis. This Aristotle assumes with Plato and all contemporary astronomy, but proves it in detail of the first sphere. Hence, following a view of the problem which proceeded from Plato, we must assume the number of spheres and ascribe to them those motions which it is necessary to presuppose in order to explain the actual movements of the seven planets from merely uniform circular motions. On this hypothesis Eudoxus had already fixed the number of the spheres, which cause the motion of the planets, including the seven spheres in which the planets are fastened, at twenty-six, and Callippus at thirty-three. Aristotle follows them, but as according to his theory the external spheres stand to the internal as form to matter, the moving to the moved, every sphere must impart its movement to all the spheres which it includes, just as the outermost does, which carries them all round in its daily revolution. Thus the independent movement of each planet must be disturbed by the motion of the whole number of circumambient spheres,

unless special precautions are taken to prevent it. Hence Aristotle assumes that between the spheres of each planet and those of the planet immediately beneath there are as many 'backward-moving' spheres (*σφαῖραι ἀνελίττουσαι*) revolving in the opposite direction, as are required to neutralise the influence of the one upon the other. The number of these spheres he puts at twenty-two, and by adding them to the spheres of Callippus he obtains fifty-six as the entire number of heavenly spheres, including that of the fixed stars. To each of these, as to 'the first heaven,' its motion must be imparted by an eternal and unlimited, and therefore incorporeal substance, by a spirit belonging to it; and thus there must be as many sphere-spirits as spheres. For this reason Aristotle also extols the stars as animated, rational, divine beings, standing far above mankind. But he will not assign anything more than probability to his assertions about the number of the spheres and the sphere-spirits ('Metaph.' xii. 8; 'Simpl. De Cælo;' Schol. in Arist. 498 ff.).

In consequence of friction, especially in the places which lie beneath the sun, the motion of the heavenly spheres gives rise to light and warmth in the air. But owing to the inclination of the course of the sun this result occurs in a different degree for every place in the different seasons of the year. Hence follows the circle of origin and decay, this copy of the eternal in the perishable, the flow and ebb of matter, and the transposition of elements into each other, out of which arise all the atmospheric and terrestrial phenomena with which Aristotle's meteorology is occupied.

§ 59. *Living Beings.*

Aristotle has devoted a great part of his scientific labours to the study of organic nature (see p. 173). For this purpose he could doubtless avail himself of many inquiries of physicists and physicians—as, for instance, of Democritus, but his own contributions, from all indications, went so far beyond theirs that we need have no scruple in calling him not only the most eminent representative, but also the chief founder of comparative and systematic zoology among the Greeks. And even if he did not write his work on Plants, yet from his activity as a teacher he deserves to be called the first founder of scientific botany.

Life consists in the capacity of movement. But every movement presupposes two things: a form which moves, and a material which is moved. The material is the body, the form is the *soul* of the living being. Hence the soul is not without body, nor is it corporeal, and at the same time it is unmoved, and not a self-moving element, as Plato thought; it stands in the same connection with the body, as form does everywhere with matter. As the form of the body, it is also its object (see p. 190); the body is only the instrument of the soul, and its nature is determined by this office. This is the conception of the *organic* (a conception which, like the word, was first made by Aristotle). If, therefore, the soul is defined as the Entelechy of an organic body (*ἐντελέχεια ἡ πρώτη σώματος φυσικοῦ ὀργανικοῦ*, 'De An.' ii. 1. 412 b. 4), this means that it

is the power which moves the soul and fixes its structure. It is, therefore, quite natural that the teleological activity of nature comes most plainly to the surface in living things, because in them from the very beginning all is calculated with regard to the soul and the operations proceeding from the soul. But if that activity can only overcome the resistance of matter by degrees (see p. 192), the life of the soul is in itself very unequal in quality. The life of plants consists in nourishment and reproduction; in animals we have the additional factor of sensible perception, and, in the great majority, of local movement; in man we go further and attain to thought. Hence Aristotle, partly in harmony with Plato (p. 154), assumes three kinds of souls, which when combined into one individual soul become three parts of the soul. There is the nourishing, or plant soul; the sensible, or animal soul, and the rational, or human soul. The gradation of living beings corresponds to the progressive development of the life of the soul. It proceeds constantly, by the aid of gradual transitions, from the most imperfect to the highest, while the numerous analogies, which we find between the various parts, show that the whole series is governed by the same laws.

Plants form the lowest stage. Limited to the functions of nourishment and reproduction, they are without any uniform centre (*μεσότης*) for their life, and are therefore incapable of feeling. In the treatises which have come down to us, Aristotle only allows them a passing notice. With *animals*, on the other

hand, he occupies himself in great detail,[1] and makes it his object throughout to unite the knowledge of their importance for the whole, and their position in the whole, with the most exact acquaintance with particular facts. The body of animals is composed of matter consisting of like parts (ὁμοιομερῆ), which in turn is a mixture of elementary matter. Flesh is the seat of feeling (the nerves were a later discovery), and is thus of special importance. The direct repository of the soul is the breath as the source of living warmth, a body connected with the æther, with which it passes in the seed from the father to the child. The chief seat of living warmth is the central organ, which in sanguineous animals is the heart. In the heart the blood is prepared from the nourishment conveyed to it by the veins. The blood serves partly for the nourishment of the body, and partly also (see below) gives rise to certain presentations. The genesis of animals assumes various forms which the philosopher has carefully investigated. Besides sexual generation, he assumes an original generation, even among certain fishes and insects. Yet the first kind of genesis is in his eyes the more perfect. The male sex stands to the female as form to matter. The soul of the child comes exclusively from the first, the body from the second. The physiological reason of this different relation lies in the fact that the female sex, owing to its colder nature, cannot sufficiently prepare the blood needed for the generative material. The mode in which the organism is shaped consists in general in the development from

[1] J. B. Meyer, *Aristoteles' Thierkunde*, 1855.

the vermicular shape, through the egg, to an organic form. But in regard to their genesis, as in regard to their bodily structure, their habitats, their mode of life, and progression, there are the most remarkable differences among animals. Aristotle is at pains to prove the gradual progress from the lower to the higher, which he assumes, in all these respects, but we cannot be astonished if he has failed to carry this point of view through without some deviation, or establish upon it a natural classification of the animal kingdom. Among the nine classes of animals which he usually enumerates (viviparous quadrupeds, oviparous quadrupeds, birds, fishes, whales, molluscs, scaly animals, those with soft scales, and insects), the most important contrast is that between the bloodless and sanguineous animals, of which he himself remarks ('Hist. An.' iii. 7. 516 b. 22) that it coincides with the distinction between invertebrate and vertebrate animals.

§ 60. *Man.*

Man is distinguished from all other living beings by spirit (*νοῦς*) which in him is combined with the animal soul. Even his bodily structure and the lower activities of his soul answer to the loftier calling which they have received by this combination. In his bodily structure this is proclaimed by his upright position and the symmetry of his figure; he has the purest blood and the most of it; the largest brain, and the highest temperature; in the organs of speech and the hand he possesses the most valuable of all organs. Of the sensuous activities of the soul, perception

(*αἴσθησις*) is a change which is brought about in the soul by that which is perceived, through the medium of the body; and more precisely it consists in the fact that the form of what is perceived is imparted to the person perceiving it. But the separate senses, as such only, inform us on those qualities of things, to which they stand in a special relation; what they tell us of this (the *αἴσθησις τῶν ἰδίων*) is always true. The general qualities of things, on the other hand, about which we obtain information through all the senses, unity and number, size and figure, time, rest and motion, we do not know by any special sense, but only through a Common Sense (*αἰσθητήριον κοινόν*) in which all the impressions of the senses meet. It is by this common sense that we compare and distinguish the perceptions of the various senses, refer the pictures which they present to objects, and become conscious that our perception is our own. The organ of this common sense is the heart. If motion in the organ of sense continues beyond the duration of the perception, communicates itself to the central organ, and there calls up a new presentation of the sensuous picture, the result is an imagination (*φαντασία*, which term is also given to imagination as a power). This, like all utterances of the common sense, can be not only true but false. If an imagination is recognised as a copy of an earlier perception (in regard to which deception is not uncommon) we call it a remembrance (*μνήμη*), the conscious evoking of a remembrance is recollection (*ἀνάμνησις*). Hence memory has its seat equally in the common sense. A change in the central organ

caused by digestion produces sleep; and the extinction of living warmth in it produces death. Internal movements in the organs of sense, or even such as are evoked by external impressions, if they reach the central organ, result in dreams; dreams, therefore, under certain circumstances, can be indications of an incident unnoticed in our waking life. When an object of perception is ranged under the Good or the Evil, it gives rise to pleasure or aversion (feelings which, as is indicated 'De. An.' iii. 7, always contain a judgment of value) and from these comes a desire to attain or avoid. These conditions also proceed from the central point of feeling (the *αἰσθητικὴ μεσότης*, *loc. cit.* 431 a. 11). No further distinction is made between emotion and desire, and if Aristotle, like Plato, opposes *ἐπιθυμία* and *θυμός* as the purely sensual and the nobler form of irrational desire, he has not more closely defined the conception of *θυμός*. Under the term he understands anger, courage, and feeling.

But all these functions belong as such to the animal soul, to which in man there is added for the first time the spirit or thinking power (*νοῦς*). While the animal soul is born and perishes with the body of which it is the form, the spirit is without beginning or end. Before procreation it enters into the soul-germ from without (*θύραθεν*); it has no bodily organ and is not subject to suffering or change (*ἀπαθής*), nor is it affected by the death of the body. But as the spirit of a human individual, in connection with a soul, it is influenced by the change of circumstances. In the individual the

power of thought precedes actual thought; his spirit is like a *tabula rasa*, on which a definite subject is first written by thought itself (this does not mean by sensuous perception, but by the intuition of *νοητά*), and thought is always accompanied by sensuous images (*φαντάσματα*). Hence Aristotle distinguishes two kinds of *νοῦς*; that which does everything, and that which becomes everything; the active and the passive.[1] The latter is considered as being born and decaying with the body, while the active *νοῦς* is eternal in its nature (the one is *φθαρτός*, the other *ἀΐδιος*). But inasmuch as our thought, as individuals, is only possible by the co-operation of both, we have no remembrance of the earlier existence of our spirit; nor can any of those activities which, according to Aristotle, are found only in beings compounded of *νοῦς* and soul,[2] be ascribed to the bodiless spirit either before or after its present life.[3] More exact definitions on the nature of passive reason, and its relation to the active, will be sought in vain in Aristotle; we do indeed see that he attempted to find a bond in them which is to establish the connection between the *νοῦς* and the animal soul; but he does not show us how the various qualities which he ascribes to it can be united without contradiction; nor has he even raised the question,

[1] The latter he calls *νοῦς παθητικός*, the former he terms *τὸ ποιοῦν*. The phrase *νοῦς ποιητικός* is first found in later writers.

[2] The *διανοεῖσθαι, φιλεῖν, μισεῖν, μνημονεύειν*, which, according to *De An.* i. 4, are not *πάθη* of the *νοῦς* but of the *κοινόν*.

[3] For the above, cf. *De. An.* iii. 4. 5. c. 7. 431 a. 14. b. 2, c. 8. 432 a. 8, i. 4. 408 b. 18 ff., ii. 2. 413 b. 24; *Gen. An.* ii. 3. Cf. *Phil. d. Gr.* ii. *b.* 566 ff., 602 ff. *Sitzungsber. d. Berl. Akad.* 1882, *Nr.* 49.

what is the seat of the human personality; how the bodily *νοῦς* can lead a personal life without memory &c.; how, on the other hand, self-consciousness and unity of personal life, of which it is the expression, arise by the combination of the *νοῦς* with the animal soul, of the eternal with the perishable, and how the nature compounded of both can be their subject.

On the combination of reason with the lower powers of the soul rest those spiritual activities by which man is raised above the animals. The activity of the *νοῦς*, purely as such, is that immediate grasping of the highest truths, which has been already mentioned. From this, Aristotle, following Plato, distinguishes mediate knowledge as *διάνοια* or *ἐπιστήμη*, and from this again opinion, which is related to what is not necessary. But Aristotle gives no further psychological explanation of one or the other. If desire is accompanied by reason it becomes volition (*βούλησις*). Aristotle unconditionally presupposes freedom of will, and proves it by the fact that virtue is voluntary, and we are universally held accountable for our acts. Hence, he also maintains that our volition decides on the final aims of our action (the most universal moral judgments), and that the correctness of our aims depends on virtue ('Eth.' vi. 13. 1144 a. 6 &c.). On the other hand, reflection must fix on the best means for these ends. So far as reason renders this service it is called the reflective or practical reason (*νοῦς* or *λόγος πρακτικός*, *διάνοια πρακτική*, *τὸ λογιστικόν*, in distinction to *ἐπιστημονικόν*), and prudence (insight, *φρόνησις*) consists in the improvement of this reason.

More precise inquiries about the internal processes by which acts of will are realised, the possibility and the limits of the freedom of the will, are not found in Aristotle.

§ 61. *The Ethics of Aristotle.*

The aim of all human activity is, in general, Happiness. On this fact no Greek moralist had any doubt. Happiness alone is desired for its own sake, and not for the sake of something else. But Aristotle does not derive the measure, by which the conditions of happiness are determined, from the subjective feeling, but from the objective character of the activities of life. 'Eudaimonia' consists in the beauty and perfection of existence as such; the enjoyment which arises in each individual from this perfection is only a consequence of it, not the ground upon which its value rests, and on which its extent depends. For every living creature the good consists in the perfection of its activity; and therefore for men, according to Aristotle, it consists in the perfection of the specially human activity. This is the activity of reason, and virtue is the activity of reason in harmony with its mission. Hence the happiness of men, as such, consists in virtue. Or if two kinds of activity and two series of virtues are to be distinguished—the theoretic and the practical—scientific or pure activity of thought is the more valuable,[1] practical activity or ethical virtue is the second essential constituent of happiness. But there

[1] *Metaph.* xii. 7. 1072 b. 24: ἡ θεωρία τὸ ἥδιστον καὶ ἄριστον. *Eth.* x. 7. c. 8. 1178 b. 1 ff.

are further considerations. Maturity and perfection of life are a part of happiness: a child cannot be happy because he is as yet incapable of any complete activity (*ἀρετή*). Poverty, sickness, and misfortune disturb happiness, and withdraw from virtuous activity the aids which wealth, power, and influence secure to it; delight in children, intercourse with friends, health, beauty, noble birth are in themselves valuable. But only inward excellence is the positive constituent element of happiness. To this, external and corporeal goods are related merely as negative conditions (like material causes to final causes in nature); even the extremity of misfortune cannot make a good man miserable (*ἄθλιος*), though it may stand in the way of his eudaimonia. Just as little does pleasure form an independent part of the highest good in the sense that it can be made an object of action. For though it is inseparable from every perfect activity, as the natural result of it, and does not deserve the reproaches which Plato and Speusippus have heaped upon it, yet its value depends entirely on that of the activity from which it has arisen. He only is virtuous who is satisfied by the performance of what is good and beautiful without any addition, and who joyfully sacrifices everything else to this activity ('Eth.' i. 5–11; x. 1–9, cf. vii. 12–15).

Of the qualities on which happiness rests, the advantages of thought and volition, the dianoetic and ethical virtues, the latter only are the object of ethics. The conception of ethical virtue is defined by three notes: it is a certain quality of will, which is placed

in the mean suitable to our nature, as fixed by reason and in the manner in which the prudent man would fix it (ἕξις προαιρετικὴ ἐν μεσότητι οὖσα τῇ πρὸς ἡμᾶς, ὡρισμένη λόγῳ καὶ ὡς ἂν ὁ φρόνιμος ὁρίσειεν 'Eth.' ii. 6, *init.*). These definitions are carried out further, first in a general manner in 'Eth.' i. 13–ii. 9; and then more specially, the first in iii. 1–8; the second in iii. 9–v. 15; the third in Book vi.

(1) All virtues rest on certain natural capacities (ἀρεταὶ φυσικαί); but they only become virtues in the proper sense (κυρία ἀρετή) when they are accompanied by insight. On the other hand, virtue as ethical has its seat specially in the will. When Socrates referred it to knowledge, he overlooked the fact that in virtue the free decision of the will is concerned, not with the knowledge of moral rules, but with their application, with the government of the passions by the reason. Hence Aristotle devotes a special examination to the conceptions which denote the various forms of the determination of the will ('Eth.' iii.), the conception of what is voluntary, what is intended, &c. But the determination of will only becomes virtue when it is a lasting quality (ἕξις), a firmly established sentiment, such as can only be found in mature men.

(2) Regarded as to its contents that quality of will is to be called moral which preserves the right mean between excess and defect. The nature of this mean depends upon the peculiar nature of the actor, for what is correct for one person may be too much or too little for another. Every virtue is therefore a mean between two defects, of which some-

times the one and sometimes the other is the more distant. Aristotle proves this more at length in the case of the individual virtues, bravery, self-control, &c., without, however, deriving them according to any fixed principle, such as Plato follows in his cardinal virtues. He treats justice, the cardinal virtue of civic life, most fully, devoting to it the whole fifth book of his 'Ethics,' a treatise which remained through the middle ages the basis of natural law. He regards as its object the correct apportionment of rewards and punishments (*κέρδος* and *ζημία*), and according as he deals with public or private law he distinguishes justice in dividing (*διανεμητική*) from justice in correcting (*διορθωτική*). The first has to apportion the honours and advantages which accrue to the individual from the community according to the worth of the recipient, the second must see that the balance of gain and loss is kept on either side in voluntary contracts (*συναλλάγματα ἑκούσια*), and that of offence and punishment in involuntary legal processes. For the first, as Aristotle perversely maintains, the principle of geometrical proportion holds good, for the second the principle of arithmetical proportion. Justice in the strictest sense is that which holds good for equals, *i.e.* political justice. This is partly natural and partly legal; and equity consists in a correction of the second by the first.

(3) Who is to decide in any given case where the proper mean lies? Aristotle tells us that this is the work of insight (cf. § 60, *end*), which differs from the other dianoetic virtues, because these are partly directed to what is necessary only, like *νοῦς* and

ἐπιστήμη (cf. p. 208), and σοφία which arises from the two; and partly, like τέχνη, though concerned with what is changeable, they make production and not action their aim (cf. p. 181).

From virtues and vices in the proper sense—*i.e.* from correct and perverse qualities of will—Aristotle distinguishes (vii. 1-11) those conditions which arise not so much from an habitual direction of will, as from the strength or weakness of the will in regard to the passions—moderation and endurance (ἐγκράτεια and καρτερία) on the one hand; and on the other excess and effeminacy. Finally, in his beautiful section on love and friendship (for φιλία means both), so full of the most delicate observations and the most pertinent remarks (Books viii. ix.), he turns his attention to a moral relation in which it is already announced that man in his nature is a social being, and even that every man is related and friendly to every other (viii. 1. 1155 a. 16 ff.; c. 13. 1161 b. 5), and that a common justice unites all men ('Rhet.' i. 13, *init.*). This trait is the foundation of the family and the State.

§ 62. *The Politics of Aristotle.*

The impulse towards a common life with his fellows lies in the very nature of man (ἄνθρωπος φύσει πολιτικὸν ζῷον, 'Pol.' i. 2, 1253 a. 2), and this common life is needed not only to sustain, secure, and complete his physical existence, but above all because it is only by this means that a good education and an arrangement of life by law and justice is possible ('Eth.' x. 10).

The aim of the State, therefore, is not limited to securing legality, repulsing foreign enemies, and sustaining life; its mission is something far higher and more comprehensive, being nothing less than the happiness of the citizens in a perfect common life (*ἡ τοῦ εὖ ζῆν κοινωνία* or *ζωῆς τελείας χάριν καὶ αὐτάρκους*, 'Pol.' iii. 9. 1288 b. 33). For this reason the State is in its nature prior to the individual and the family, as in truth the parts of a whole are invariably conditioned by the whole as their aim to which they are subservient ('Pol.' i. 2). And as virtue is the most essential part of happiness, Aristotle, like Plato, recognises the chief object of the State to be the education of the people in virtue, and he distinctly disapproves of any arrangement by which a State is devoted to war and conquest instead of the peaceful care of moral and scientific education.

But in point of time, at any rate, families and communities precede the State. Nature in the first instance brings man and wife together to found a household; families extend into villages (*κῶμαι*); the combination of several villages makes a State-community (*πόλις*), which Aristotle does not distinguish from the State. The village-community is merely a stage in the transition to the State, in which it ends. On the other hand, Aristotle shows in the most striking manner ('Pol.' ii. 1) that Plato's desire to sacrifice the family and private property to the unity of the State was not only impossible to realise in every respect, but proceeded from a false notion of this unity. A State is not merely something uniform; it is a whole consisting

of many various parts. Aristotle treats of marriage and the rest of the relations of family life with sound moral intelligence ('Pol.' i. 2, 13; 'Eth.' viii. 14, &c.). On the other hand he also pays his tribute to the national prejudice of the Greeks, when he makes the untenable attempt to justify slavery by the presupposition that there are men who are only capable of bodily labour and must therefore be ruled by others; and this he considers to be in general the relation of barbarians to Hellenes ('Pol.' i. 4 ff.). The same holds good of his discussions on trade and industry (i. 8 ff.). He will allow only those kinds of acquisition to be natural which directly satisfy our needs. All trade concerned with money he regards with contempt and mistrust, and considers 'banausic' work to be unworthy of a free man.

In his theory of political constitutions Aristotle does not follow Plato in regarding a single form as the only correct one, and the rest as perversions. On the contrary he sees that the arrangements of the constitution must be adapted to the character and requirements of the people for whom they are intended. Under different circumstances different things are correct, and what is itself imperfect may possibly be the best that can be obtained under the circumstances. For if the *correctness* of constitutions depends on fixing the *aim* of the State, and those are correct constitutions in which the common good, not the advantage of the ruling party, is the final object of the State, while all others are perversions, the *form* of the constitution depends on the apportionment of political power. This

must be determined by the actual importance of the various classes in the nation for the State; for a constitution is not likely to live, unless it has stronger supporters than opponents, and it is only just when it assigns equal rights to the citizens so far as they are equal, and unequal rights so far as they are unequal. But the most important differences among the citizens relate to their virtue, *i.e.* to their personal capability in everything upon which the welfare of the State depends, their property, their noble or ignoble origin, their freedom. Hence though Aristotle adopts the traditional division of constitutions according to the number of the ruling class, and thus (like Plato, 'Polit.' 308 ff.) enumerates six leading forms, Monarchy, Aristocracy, 'Polity' (called also Timocracy, 'Eth.' viii. 12), as correct forms; Democracy, Oligarchy, and Tyranny as perverse forms (*ἡμαρτημέναι, παρεκβάσεις*), yet he does not omit to observe that this numerical division is only derivative. Monarchy naturally arises when one person is so far superior to all the rest that he is their born ruler; aristocracy when the same is the case with a minority; and 'polity' when all the citizens are nearly equal in capability (by which in this case martial vigour is chiefly meant). Democracy comes into being when the mass of the poor and free have the guidance of the State in their hands; oligarchy when a minority of the rich and noble men are the rulers; tyranny when a single person becomes by violence the ruler of the State. On similar principles, the participation of one or other element is determined in the mixed forms of constitution (iii. 6–13, cf. c. 17.

1288 a. 8; iv. 4; iv. 11 f.; vi. 2, *init.*). Yet we cannot deny that Aristotle has not succeeded in bringing these different points of view into complete harmony, nor has he carried them out with perfect consistency.

At the basis of the description of his 'best State' (vii. f., more particularly iv. f., cf. p. 175) Aristotle, like Plato, places the arrangements of a Greek republic. A Greek State it must be, for it is only among the Hellenes that he finds the qualities which make the combination of freedom and civic order possible. It must also be a republic, because it is only in the heroic age that he finds the conditions necessary for a monarchy in his sense (iii. 14 ff.), and in his own day he believes (v. 13. 1313 a. 3) that no single person can rise so far above the rest that a free people would voluntarily endure his sole dominion. His model State is an aristocracy which in its plan approaches the Platonic, however far removed from it in many of the details. All the citizens are to have the right to participate in the management of the State, and they are to be summoned to the exercise of this duty, when they are placed among those of riper age. But in the best State those only are to be citizens who are qualified to lead the State by their position in life and their education. Hence, on the one hand, Aristotle demands that all bodily labour, agriculture, and industry must be undertaken by slaves or metics, and, on the other, he prescribes an education which is to be entirely carried out by the State. This education closely resembles that of Plato. Yet, in our incomplete work, neither the section on education nor the description of the best State is brought to a close.

Besides his pattern State, Aristotle has also discussed the incomplete forms with minute care. He distinguishes the various kinds of democracy, oligarchy, and tyranny, which arose partly out of the different natures of the ruling body and partly out of the fact that the characteristics of each form are carried out with more or less thoroughness. He examines the conditions on which depend the origin, maintenance, and decay of each form of State, and the arrangements and principles of government which belong to them. Finally he inquires what form of constitution is best for the majority of States and under ordinary circumstances. He finds the answer in a combination of oligarchic and democratic arrangements by which the centre of gravity of civic life is thrown upon the prosperous middle class. Hence he secures for the progress of his State that regularity, and preservation of the correct mean, which are the best security for the continuance of a constitution, and at the same time best correspond to the ethical principles of the philosopher. Aristotle calls this form of State a 'polity,' without explaining its relation to the constitution which bears the same name among the correct forms, but which is nowhere explained in detail. Next to it comes the form 'usually termed aristocracy' (iv. 7). But this part of the Aristotelian 'Ethics' is also left unfinished.

§ 63. *Rhetoric and Art. Attitude of Aristotle to Religion.*

Rhetoric occupies a kind of middle place between the 'practical' and 'poetic' sciences. On the one hand, it is treated as an art (*τέχνη*); on the other, as a subsidiary branch of dialectic (in the sense mentioned on p. 173), and of politics and ethics—an application of the first to the aims of the latter. The object of the orator is conviction by probability. Rhetoric is the artistic introduction to such conviction, in the various provinces to which senatorial, forensic, and epideictic speech are related. The most important point for rhetoric, therefore, is the doctrine of oratorical proof, to which the first and second books of the 'Rhetoric' are devoted (on book iii., see p. 176). Compared with this, Aristotle ascribes a very subordinate and conditional value to the power of exciting anger or sympathy, to grace of language, and skill in action, in which rhetoric down to his time had been accustomed to look for her strength.

Aristotle does not appear to have treated any of the fine arts but poetry in independent works, and as his 'Poetics' have come down to us in a very mutilated form, we cannot gather from the writings of the philosopher any perfect æsthetic theory, or any complete doctrine of art. The conception of the beautiful, which is the leading idea of modern æsthetics, is as indefinite in Aristotle as in Plato (p. 162), and is not accurately distinguished from that of the good. Like Plato, he considers art as imitation (*μίμησις*); but

what art presents in imitation is not in Aristotle the sensuous phenomenon, but the inner nature of things, not what *has* happened, but what ought to happen according to the nature of things (the *ἀναγκαῖον ἢ εἰκός*); its forms are types (*παράδειγμα*) of universal laws; hence poetry is nobler and nearer to philosophy than history ('Poet.' 9. 15). And this is the cause of its peculiar effect. If Aristotle ('Pol.' viii. 5, 7) distinguishes a quadruple use of music: (1) for amusement (*παιδία*), (2) for moral culture, (3) for recreation (*διαγωγή* connected with *φρόνησις*), and (4) for 'purification' (*κάθαρσις*)—if all art may be applied in one of these directions, yet mere amusement can never be its final object. But all the other three operations proceed from the fact that a work of art brings into sight and application the general laws in the particular object. The Katharsis, *i.e.* the liberation from disturbing emotions, is not to be regarded, with Bernays, as merely giving an opportunity to the emotions to relieve themselves by occupation. As belonging to art it can only be brought about by an excitement of the feelings in which they are subjected to a fixed measure and law, and carried away from our own experiences and circumstances to that which is common to all men. In this sense we have to understand the famous definition of tragedy.[1]

In regard to religion we have nothing from Aristotle

[1] *Poet.* 6. 1449 b. 24. *ἔστιν οὖν τραγῳδία μίμησις πράξεως σπουδαίας καὶ τελείας μέγεθος ἐχούσης, ἡδυσμένῳ λόγῳ χωρὶς ἑκάστῳ τῶν εἰδῶν* (the kinds of *ἡδυσμ. λόγ.* i.e. *λέξις*, and *μέλος*) *ἐν τοῖς μορίοις* (dialogue and chorus), *δρώντων καὶ οὐ δι' ἀπαγγελίας, δι' ἐλέου καὶ φόβου περαίνουσα τὴν τῶν τοιούτων παθημάτων κάθαρσιν.*

but scattered expressions. His own theology is an abstract monotheism, which excludes any interference on the part of the Deity in the course of the world (cf. p. 193). Though he sees something divine in nature and her adaptation of means to ends, and more immediately in the human spirit, the thought of referring an effect to any but natural causes is so far from him that he does not accept the Socratic belief in Providence, even in the form which Plato adopted it (p. 161). He is equally without any belief in a future retribution. In the Deity he finds the final source of the coherence, order, and movement of the world, but every individual thing is to be explained in a purely natural way. He reverences the Deity with admiring affection, but demands no affection in return and no special providence. Hence the religion of his country is for him true in so far only as it contains a belief in a deity and in the divine nature of the heavens and the stars—a truth which he concedes to it as to every general and primeval conviction: 'all besides is myth,' which the philosopher derives partly from the inclination of men to anthropomorphic presentations, and partly from political considerations ('Metaph.' xii. 8. 1074 a. 38 ff.; 'De Cælo,' i. 3. 270 b. 16; ii. 1. 284 a. 2; 'Meteor.' i. 3. 339 b. 19; 'Pol.' i. 2. 1252 b. 24). In the State he desires to retain the existing religion; a reform, such as Plato held to be necessary, is not required.

§ 64. *The Peripatetic School.*

After the death of its founder, the Peripatetic school was led by his faithful friend, the learned and eloquent Theophrastus of Lesbos (who died 288–286 B.C., at the age of eighty-five, according to Diog. v. 40. 58. 68). By his long and successful labours as a teacher, and his numerous writings, which cover the whole field of philosophy,[1] Theophrastus contributed much to extend and strengthen the school. He also bequeathed to it an estate. On the whole he adheres as a philosopher to the soil of the Aristotelian system, but in particular points he endeavours to supplement and correct it by independent investigations. The Aristotelian logic received various extensions and alterations from him and Eudemus. The most important of these consist in the separate treatment of the doctrine of propositions, the limitations of their distinctions of modality to the degree of subjective certainty, the enriching of the discussion of the syllogism by the doctrine of 'hypothetical' conclusions, among which are also reckoned the disjunctive. Moreover, as is shown by the fragment of his treatise on metaphysics ('Fr.' 12), Theophrastus found difficulties in essential definitions of the Aristotelian metaphysics, more especially in the adaptation of means to ends in nature, and in the relation of the *primum mobile* to the world. We do not know how he solved these diffi-

[1] Those which have been preserved, and the fragments of those what are lost have been edited by Schneider (1818 ff.) and Wimmer (1854, 1862); cf. p. 8.

culties, but he refused to abandon the determinations themselves. He modified Aristotle's doctrine on movement, and raised considerable doubts against his definition of space. But in the large majority of cases he follows the Aristotelian physics, and especially defends his doctrine of the eternity of the world against the Stoic Zeno (in Ps. Philo, 'Ætern. Mundi,' c. 23 ff.). By his two works on plants, which have come down to us, and which in their leading thoughts closely adhere to Aristotle, he became the great authority on botany till past the end of the middle ages. He deviated from Aristotle in denoting human thought as a movement of the soul and with minute care removed the difficulties which stand in the way of the distinction between the active and the passive reason, without, however, removing this distinction. His ethics, which he embodied in several writings and carried out into detail with great knowledge of mankind, was charged by (Stoic) opponents with attributing too much value to external goods; yet there is at most a slight difference of degree between him and his teacher in this respect. He is further removed from him by his disinclination to marriage, in which he feared a disturbance of scientific labour; and in his disapproval of blood-offerings and flesh-diet, which he derived from the kinship of all living creatures. On the other hand, he follows his master (p. 213) when he maintains that all men, and not merely those of one nation, are interconnected and related.

Beside Theophrastus stands Eudemus of Rhodus as the most important of the personal pupils of the Stagirite.

He also was active as a teacher of philosophy, no doubt in his own city. By his learned historical works (p. 8) he did good service for the history of the sciences. In his views he adheres even more closely than Theophrastus to his master. Simplicius, 'Phys.' 411. 15, calls him his most faithful (γνησιώτατος) disciple. In 'Logic' he adopted the improvements of Theophrastus, but in his 'Physics' he kept closely to the Aristotelian, often repeating the very words (cf. 'Eudemi Fragmenta,' ed. Spengel). The most important distinction between his ethics (which have been adopted into the Aristotelian collection) and the ethics of Aristotle consists in the combination which he makes, after Plato, between ethics and theology. Not only does he derive the disposition to virtue from the Deity, but he conceives speculation, in which Aristotle had sought the highest good, more distinctly as a knowledge of God, and wishes to measure the value of all things and actions by their relation to this. The internal unity of all virtues he finds in the love of the good and beautiful for its own sake (καλοκἀγαθία).

A third Aristotelian is Aristoxenus of Tarentum, who attained renown by his 'Harmonics,' which we still possess, and other writings on music. Passing from the Pythagorean school into the Peripatetic, this philosopher combined a Pythagorean element with what was Aristotelian in his moral prescripts, and in his theory of music. Like some of the later Pythagoreans, he explained the soul to be a harmony of the body, and therefore opposed its immortality. In this he was joined by Dicæarchus of Messene, his fellow-

pupil. Dicæarchus also deviated from Aristotle in giving the advantage to the practical over the theoretic life; but on the other hand, his 'Tripoliticus' stands essentially on the ground of the Aristotelian 'Politics.' Regarding Phanias and Clearchus we have few statements, and these mostly refer to history or with the first to natural history; Callisthenes (cf. p. 171), Leo of Byzantium, and Clytus, are only known to us as historians, Meno only as a physician. The case is the same with the pupils of Theophrastus: Demetrius of Phalerum, Duris, Chameleon, and Praxiphanes; they are rather scholars and men of literature than philosophers.

The more important is Strato of Lampsacus, the 'physicist,' who succeeded Theophrastus, and for eighteen years was head of the Peripatetic school at Athens. This acute inquirer not only found much to correct in details in the theories of Aristotle,[1] but he was opposed entirely to his spiritual and dualistic view of the world. He placed the deity on the same level with the unconscious activity of nature, and instead of the Aristotelian teleology demanded a purely physical explanation of phenomena. Of these he considered warmth and cold to be the most universal sources, and more especially warmth as the active principle. In man he set apart the spirit as something

[1] For instance, he attributed weight to all bodies, and explained the rising of air and fire from the pressure of heavier bodies on lighter; he assumed empty spaces within the world, and defined space as the vacuum lying between inclosing and inclosed bodies. He wished time to be called the measure of movement and rest, not the number of movement; the sky, as we are told, he regarded as consisting of fiery, not of ethereal matter.

distinct in nature from the animal soul, and regarded all activities of the soul, thought as well as feeling, as motions of the same rational being which was seated in the head, in the region between the eye-brows, and from thence (as it seems with the Pneuma for its substratum) permeated the various parts of the body. Hence he controverted the immortality of the soul.

Strato was followed by Lyco, who was leader of the school for forty-four years, down to 226–224 B.C.; after him came Aristo of Ceos; and after Aristo, Critolaus of Phaselis in Lycia, who in 156 B.C., when already advanced in years (he was more than eighty-two years old) visited Rome as an ambassador from Athens with Diogenes and Carneades. His successor was Diodorus of Tyre, and Diodorus (about or before 120 B.C.) was succeeded by Erymneus. Contemporary with Lyco were Hieronymus of Rhodes, and Prytanis; Phormio of Ephesus lived about the beginning of the second century; about the same time and later came the philosophers mentioned on p. 10, Hermippus, Satyrus, Sotion, and Antisthenes. But the philosophical services of these men appear to be almost entirely limited to handing down the Peripatetic doctrines. Hence they appear to have chiefly occupied themselves with practical philosophy, however celebrated the lectures of Lyco, Aristo, Hieronymus, and Critolaus, might be in point of form. Only in Hieronymus do we hear of any considerable deviation from the Aristotelian ethics. He declared freedom from pain, which he carefully distinguished from pleasure, to be the highest good. It is less important that Diodorus placed the *summum*

bonum in a virtuous and painless life, for he, like Aristotle, considered virtue to be its most indispensable element. Even those parts of the spurious writings in our collection of Aristotle, which we can refer to the third century, or at any rate to the time before the end of the second, deviate from Aristotle only in details which are of little importance from the whole system. If they furnish a further proof that scientific activity did not die out in the Peripatetic school after Theophrastus and Strato, they also show that such activity, though it might supplement and correct individual details, did not attempt to point out any new path for the solution of the greater problems.

THIRD PERIOD.

The Post-Aristotelian Philosophy.

§ 65. *Introduction.*

The revolution caused in the life of the Grecian people by the rise of the Macedonian power, and the conquests of Alexander could not fail to exercise the deepest influence on science. In the countries of the east and south an inexhaustible field of labour was opened, an abundance of new intuitions streamed in, new centres of national intercourse and civilisation arose. On the other hand, the Hellenic mother country, deprived of its political independence and importance, became an object of contention to strangers and the scene of their contests. The prosperity and population of the country sank in hopeless decay. Moral life was in danger of being swamped in the petty interests of private life, in the search for enjoyment and gain, and the struggle for daily subsistence. It had long ceased to have the support of the old belief in the gods, and it was now without the control of a vigorous political activity, directed to great aims. Under such circumstances it was natural that the pleasure and the power for free and purely scientific contemplation of the world should disappear; that practical questions should force themselves into the foreground, and that the chief value o philosophy should be sought more and more in the fac

that it provided men with a refuge against the miseries of life. Yet for this purpose a definite scientific theory was still found indispensable, to satisfy the speculative tendencies of the Greek nation and the convictions which since the time of Socrates had taken such deep root. At the same time it is easy to understand that this mission of philosophy could only be satisfied when the individual made himself independent of all external things and withdrew into his inner life. Social union was now recommended by those who knew its value from a cosmopolitan rather than a political point of view, in harmony with the relations of the Alexandrine and Roman period. This view was the more prevalent, as Plato and Aristotle, in their metaphysics as well as their ethics, had prepared the way for this retirement from the external world. The stages through which this mode of thought passed in the centuries after Aristotle were stated on p. 31.

FIRST SECTION.

STOICISM, EPICUREANISM, SCEPTICISM.

I. The Stoic Philosophy.

§ 66. *The Stoic School in the Third and Second Centuries* B.C.

The founder of the Stoic school was Zeno of Citium in Cyprus, a Greek city with a Phœnician element. His death appears to have taken place about 270 B.C.; his birth, as he was seventy-two years old (Diog. vii. 28,

against which nothing is proved by the interpolated letter, *ibid.* 9) about 342 B.C.[1] In his twenty-second year, he came to Athens, where he attached himself to the Cynic Crates, and afterwards to Stilpo, though he also availed himself of the instruction of the Megarian Diodorus, of Xenocrates, and Polemo. About 300 B.C., or perhaps somewhat earlier, he came forward as a teacher and philosophical writer; his pupils were at first called Zenonians, but afterwards Stoics, from the Stoa Pœcile, their place of meeting. Universally honoured for his character, he voluntarily put an end to his life. He was followed by Cleanthes of Assus in the Troad, a man of singular force of will, moderation, and moral strength, but of less versatility of thought. According to Ind. Hercul. (see *supra*, p. 11), col. 29, he was born in 331 B.C., and died by voluntary starvation, apparently when eighty years of age (Diog. 176), *i.e.* in 251 B.C., but according to others, when ninety-nine years old. Besides Cleanthes the following are the most important among Zeno's personal pupils: Persæus, the countryman of his master, and sharer of his house; Aristo of Chius, and Herillus of Carthage (cf. § 67. 71); Sphærus of Bosporus, the tutor of Cleomenes, the Spartan king, and Aratus, the poet of Soli in Cilicia. The successor of Cleanthes was Chrysippus of Soli (he died in Ol. 143, 208–4 B.C., at the age of seventy-three, and was therefore born in 281–76 B.C.), an acute dialectician and laborious scholar. By his successful labours as a teacher

[1] E. Rohde (*Rh. Mus.* xxxiii. 622 f.), Gompertz (*ib.* xxxiv. 154) place the death, with Jerome, in 263–4, the birth in 336, which can hardly be harmonised with Diog. 28. 24.

and his very numerous works—which, it is true, were too discursive, and negligent in style and exposition—he not only rendered very great services for the outward spread of Stoicism, but brought its system of teaching to perfection. Contemporaries of Chrysippus are Eratosthenes of Cyrene (276–2 B.C.—196–2 B.C) the famous scholar, a pupil of Aristo, and the moralist Teles, whose Cynicism leads us to suppose that he also owed his connection with the Stoa to Aristo (Stob. 'Floril.' 95, 21). Chrysippus was succeeded by two pupils, first Zeno of Tarsus, then Diogenes of Seleucia (Diogenes the Babylonian) who in 156 B.C. took part in the embassy of the philosophers to Rome (p. 226), but apparently did not long survive it. Of the numerous pupils of Diogenes, Antipater of Tarsus was his successor in the chair at Athens, while Archedemus, also of Tarsus, founded a school in Babylon. Two other pupils of Diogenes, Boethus and Panætius, will meet us in § 80.

§ 67. *Character and Divisions of the Stoic System.*

Of the numerous writings of the Stoic philosophers for the first three centuries of the school only fragments remain. The later accounts usually treat the Stoic doctrine as a whole, without expressly saying what doctrines belong to Zeno, and what are due to his successors, especially Chrysippus.[1] Hence it remains for us to set forth the system in the form which it

[1] A detailed investigation on this subject, the results of which, so far as they go beyond what is hitherto acknowledged, I can only partially accept, will be found in R. Hirzel, *Untersuchungen zu Cicero's phil. Schriften*, ii. a. 1882.

assumed after Chrysippus, and at the same time to mark the distinctions of teaching within the school, so far as they are known to us and can be made out with probability.

What led the founder of the Stoic school to philosophy was in the first instance the necessity of finding a firm support for his moral life. He first sought to satisfy this need with the Cynic Crates. His followers also regarded themselves as offshoots from the Cynic branch of the Socratic school, and when they wished to name the men who had come nearest to their ideal of the sage they mentioned Diogenes and Antisthenes beside Socrates. Like these philosophers their object is to make man independent and happy by virtue; like them they define philosophy as the practice of virtue. (*ἄσκησις ἀρετῆς, studium virtutis, sed per ipsam virtutem*, Sen. 'Ep.' 89, 5), and make the value of theoretic inquiry dependent on its importance for moral life. Their conception of moral duties stands close to that of the Cynics (cf. § 71 f.). But what essentially distinguished the Stoa from Cynicism, and carried even its founder beyond the Cynics, is the importance which the Stoics ascribe to scientific inquiry. The final object of philosophy lies for them in its influence on the moral condition of men. But true morality is impossible without true knowledge; 'virtuous' and 'wise' are treated as synonymous terms, and though philosophy is to coincide with the exercise of virtue, it is at the same time defined as 'the knowledge of the divine and human.' If Herillus explained knowledge as the highest good and final aim of life, he returned in this from Zeno to

Aristotle. On the other hand, it was an attempt to retain Stoicism in Cynicism when Aristo not only despised learned culture, but also determined to be ignorant of dialectics and physics, because the first was useless, and the second transcended the powers of human knowledge. In the same feeling, Aristo, in his 'Ethics,' attributed a value only to the discussions of principles; the more special rules of life, on the other hand, he explained as indifferent. Zeno himself saw in scientific knowledge the indispensable condition of moral action, just as he had borrowed from the Academicians the division of philosophy into logic, physics, and ethics (see p. 167). For this systematic grounding of his ethics, he went back primarily to Heracleitus, whose physics were commended to him before all others by the decisive manner in which he carries out the thought that all individual things in the world are only apparitions of one and the same being; and that there is but one law which governs the course of nature and ought to govern the action of men. On the other hand, Zeno found a difficulty in the Platonic and Aristotelian metaphysics. He was repelled by the dualism which placed the action of necessity by the side of the action of reason in the world (cf. pp. 148, 197) and thus seemed to endanger the absolute rule of reason in human life. Moreover, the idealism and spiritualism of Plato and Aristotle, apart from the difficulties in which it had involved its authors, could not be united with the nominalism which Zeno had derived from Antisthenes (p. 118), while it also appeared too little fitted to secure a firm basis for action for Zeno to

adopt it. The more decidedly did he and his school introduce the Socratic-Platonic teleology, and the belief in Providence connected with it, into their view of the world. In many details also he supplemented the Heracleitean physics by the Aristotelian. Still greater is the influence of the Peripatetic logic on the Stoic, especially after Chrysippus. But even in his ethics Zeno was at pains to soften the harshness and severity of Cynicism, with the most important results. Hence the Stoic philosophy is by no means a continuation of the Cynic, but it has altered and supplemented it with the help of everything which could be borrowed from earlier systems.

The three parts of philosophy, which the Stoics enumerated (though Cleanthes added rhetoric to logic, politics to ethics, and theology to physics), were not always taught in the same order, and different opinions prevailed as to their relative value. The highest place was sometimes assigned to physics, as the knowledge 'of divine things,' sometimes to ethics, as the most important science for men. Zeno and Chrysippus however, belong to those who began with logic, passed from this to physics, and ended with ethics.

§ 68. *The Stoic Logic.*

Under the term Logic, which perhaps Zeno was the first to use, the Stoics since the time of Chrysippus comprehended all inquiries which were related to inward or outward speech (the λόγος ἐνδιάθετος and προφορικός). They divided, it therefore, into rhetoric and dialectic; and to the latter the doctrine of the criterion and determination of concepts was sometimes

subordinated, and sometimes added as on an equal rank. In dialectic they distinguished the doctrine of what was significant from that of the thing signified (*τὸ σημαῖνον* and *τὸ σημαινόμενον*). Under the former they included poetics, the theory of music and grammar, to the development of which in Alexandrian and Roman times Stoicism largely contributed. The doctrine of what was signified corresponds in all essentials to our formal logic. That of the criterion contains the theory of knowledge which prevailed in the school.

In opposition to Plato and Aristotle, the Stoics are pronounced empirics. If Antisthenes had recognised reality in individual things only, Zeno draws the conclusion that all knowledge must proceed from the perception of the individual. According to the Stoics, the soul is at its birth like a *tabula rasa*; everything must be given to it by the objects. The presentation (*φαντασία*) is, as Zeno and Cleanthes said, an impression (*τύπωσις*) of things in the soul, or, as Chrysippus thought, a change of the soul caused by them, which instructs us sometimes on external circumstances, and sometimes also (as Chrysippus at least expressly remarks) on our internal conditions and activities.

Out of perception arise our recollections, and from these experience (cf. p. 182). By conclusions from what is given in perception we arrive at general presentations (*ἔννοιαι*). So far as these are derived naturally and without artificial assistance from universal experiences, they form those 'common concepts' (*κοιναὶ ἔννοιαι, notitiæ communes*) which determine the convictions of men before any scientific investigation, and

are therefore called *προλήψεις*, a term borrowed from Epicurus and apparently first used in this sense by Chrysippus. Science rests on regulated demonstration and formation of concepts. The chief value of science is that it forms a conviction which cannot be shaken by objections (*κατάληψις ἀσφαλὴς καὶ ἀμετάπτωτος ὑπὸ λόγου*), or a system of such convictions. As all our presentations arise out of perceptions, the value of the knowledge they afford must depend on the question whether there are perceptions of which it is certain that they agree with the objects perceived. But this the Stoics maintain. In their view a part of our conceptions is of such a nature that they compel us to give assent to them (*συγκατατίθεσθαι*); they are connected with the consciousness that they can only arise from something real, and have direct evidence (*ἐνάργεια*). Hence when we assent to these presentations we apprehend the subject itself. It is in assenting to such a presentation that, according to Zeno, conception consists (*κατάληψις*, a term invented by Zeno). The concept, then (as distinguished from the *ἔννοια*, see *supra*), has the same contents as the simple presentation, but is distinguished from it by the consciousness of its agreement with the object. A presentation which carries this consciousness with it is called by Zeno a 'conceptual presentation' (*φαντασία καταληπτική*, which in the first instance doubtless means a presentation which is suited to become a *κατάληψις*). Consequently he maintains that conceptual presentation is the *criterion* of truth. But as the 'common concepts' arise out of perceptions as their results, these can also be regarded

as natural standards of truth, so that Chrysippus could speak of *αἴσθησις* and *πρόληψις* as criteria.[1] But the possibility of knowledge is proved by the Stoics in the last resort by the assertion that otherwise no action with rational conviction is possible. Yet they involved themselves in the contradiction that on the one hand they made perception the standard of truth, and on the other looked for perfectly certain knowledge from science only. This, indeed, not only corresponded to their scientific requirements, but to the practical demands of a system which made the virtue and happiness of men depend on their subordination to a universal law.

The part of 'dialectic' which corresponds to our formal logic has to do with what is signified or expressed (*λεκτόν*), and this is either complete or incomplete; the first form concepts, the second propositions. The most important of the determinations of the concepts is the doctrine of categories. The Stoics had only four categories in the place of the Aristotelian ten. These four were related to each other in such a manner that each succeeding one is a closer determination of that which precedes, and therefore comprises it. They are substratum (*ὑποκείμενον*, also *οὐσία*); property (*τὸ ποιόν* or *ὁ ποιός*, sc. *λόγος*), which again subdivides into *κοινῶς ποιόν* and *ἰδίως ποιόν*; quality (*πῶς ἔχον*), and related quality (*πρός τί πως ἔχον*). The general concept under which all the categories come is

[1] On the other hand, it is improbable that the statement that some of the older Stoics made the *ὀρθὸς λόγος* the criterion (Diog. vii. 54) refers to Zeno and Cleanthes, and as regards Zeno it cannot be harmonised with Sext. *Math.* vii. 150 ff., Cic. *Acad.* ii. 24. 77, i. 11. 42.

by some considered Being (probably Zeno); by others (Chrysippus) Something (τι). This Something is again divided into Being and Not-being. Among complete assertions or propositions, judgments or statements (ἀξιώματα) are those which are either true or false. The Stoics distinguished simple (categoric) and compound judgments, and among the latter they treated hypothetical judgments with especial care. In their treatment of conclusions also, they gave such prominence to the hypothetical and disjunctive that they only were to be regarded as conclusions in the proper sense. But the scientific value of this Stoic logic is very slight, and if in details it enters here and there into more precise inquiry, the pedantic external formalism, which Chrysippus especially introduced into logic, could not be of advantage to the general condition of the science.

§ 69. *The Stoic Physics; the Ultimate Basis, and the Universe.*

The view which the Stoics took of the world is governed by a triple tendency. In opposition to the dualism of the Platonic and Aristotelian metaphysics, it aims at the unity of the final cause, and the order of the world which proceeded from it: it is monistic. In contrast to their idealism, it is realistic and even materialistic. Nevertheless, they regarded everything in the world as the work of reason, as their ethics demanded, and the final basis of the world was absolute reason. Their point of view is essentially teleological and theological, and their Monism becomes a Pantheism (cf. p. 233).

In the doctrine of the Stoics only bodies are a reality. That was real, they urged, which is active or passive, but this property is only found in bodies. Hence they not only explained all substances, without excluding the human soul and the Deity, as bodies, but all properties of things were also regarded as existing in something corporeal, in the currents of air (*πνεύματα*), by which they are spread abroad, and from which they receive the tension (*τόνος*) which keeps them together. As this naturally holds good of the soul-bodies also, the virtues, affections, wisdom, walking, &c., as conditions of the soul, are called bodies and living beings. That empty space, place, time, and the notion in the mind (*λεκτόν*, cf. p. 237), were not to be regarded as bodies was only an inconsistency, though, it is true, an unavoidable one. In order to be able to explain from this point of view the fact that the soul permeates the body through its whole extent, and the properties of things the things to which they belong, the Stoics, in their doctrine of the *κρᾶσις δι' ὅλων*, denied the impenetrability of bodies. They maintained that one body could penetrate another in all its parts without becoming one material with it. Yet, in spite of their materialism, the Stoics distinguished between the material and the forces at work in it. The first taken by itself they regarded as without properties, and derived all properties of things from the rational power (*λόγος*) which penetrates them. Even the filling up of space was derived from two movements, one causing condensation, the other rarefaction, one proceeding inward, the other outward. But all the powers opera-

ting in the world come from one original power, as is proved by the unity of the world, the combination and harmony of all its parts. Like all that is real, this also must be corporeal, and is regarded more precisely as warm vapour (πνεῦμα), or fire, for it is warmth which begets, enlivens, and moves all things. But, on the other hand, the perfection of the world and the adaptation of means to ends, and more especially the rational element in human nature, shows that this final cause of the world must at the same time be the most perfect reason, the kindest, most philanthropic nature—in a word, the Deity. It is this just because it consists of the most perfect material. As everything in the world is indebted to it for its properties, its movement and life, it must stand to the universe in the same relation as our soul to our body. It penetrates all things as the πνεῦμα, or artistic fire (πῦρ τεχνικόν), enlivening them, and containing their germs in itself (λόγοι σπερματικοί). It is the soul, the spirit (νοῦς), the reason (λόγος) of the world, Providence, destiny, nature, universal law, &c.; for all these conceptions denote the same object from various sides. But as in the soul of man, though it is present in the whole body, the governing part is separate from the rest, and a special seat is assigned to it, so also in the soul of the universe. The Deity or Zeus has his seat in the uttermost circle of the world (according to Archedemus in the centre, and to Cleanthes in the sun), from whence he spreads himself through the world. But yet his distinction from the world is relative—the distinction between what is directly and what is indirectly

divine. In themselves both are the same; there is but one and the same being, of which a part takes the form of the world, while another part retains its original shape, and in that shape confronts the first as the operative cause or the Deity. Even this distinction of appearance is transitory; it has arisen in time, and in time it will pass away.

In order to form the world the Deity changed the fiery vapour, of which it consists, first into air, then into water, in which it was immanent as a formative power (λόγος σπερματικός). From the water, beneath its operation, a part was precipitated as earth; another part remained water, a third became air, and out of air, by still further rarefaction, was kindled the elementary fire. Thus was formed the body of the world in distinction to its soul, the Deity. But as this opposition has arisen in time, so with time it passes away. When the course of the present world has come to an end, a conflagration will change everything into a monstrous mass of fiery vapour. Zeus receives the world back again into himself in order to emit it again at a preordained time (cf. p. 69 ff.). Hence the history of the world and the Deity moves in an endless circle between the formation and the destruction of the world. As these always follow the same law, the innumerable successive worlds are all so exactly similar, that in every one the same persons, things, and events occur, down to the minutest details, as are found in all the rest. For an inexorable necessity, a strong connecting chain of cause and effect governs all events. In such a strictly pantheistic system

this is thoroughly consistent, and it is also expressed in the Stoic definition of fate or destiny, of nature and providence. Even the human will makes no exception in this respect. Man acts voluntarily, in so far as it is his own impulse (ὁρμή) which moves him; even that which fate ordains, he can do voluntarily, *i.e.* with his own assent; but do it he must under any circumstances: *volentem fata ducunt, nolentem trahunt*. On this connection of all things (συμπάθεια τῶν ὅλων) rests the unity, and on the rationality of the cause from which it proceeds, rest the beauty and perfection of the world; and the more eagerly the Stoics strove to establish their belief in Providence by proofs of every kind, the less could they renounce the duty of proving the universal perfection of the world, and defending it against the objections to which the numerous evils existing in it gave rise. Chrysippus appears to have been the chief author of this physical theology and theodicy. But we also know of him that he carried out the proposition that the world was made for gods and men with the pettiest and most superficial teleology. Even if the leading idea of the Stoic theodicy, that the imperfection of the individual subserves the perfection of the whole, has formed a pattern for all later attempts of a similar kind, yet the task of uniting moral evil with their theological determinism was for the Stoics the more difficult, owing to the blackness of the colours in which they were accustomed to define the extent and power of this evil.

§ 70. *Nature and Man.*

In their doctrine of nature the Stoics adhered less closely to Heracleitus than to Aristotle, as was inevitable in the existing state of knowledge. Leaving out of sight some subordinate deviations they followed Aristotle in their doctrine of the four elements, and if they found it necessary to establish the æther as a fifth body beside them, they made no distinction between the ethereal and the earthly fire. The first moved in circles, the second in straight lines (cf. p. 198). The Stoics again and again insisted that all elementary matters constantly passed one into another, that all things were to be conceived in perpetual change, and on this rested the connection of the world. For this reason it was not their object to deny the fixed condition of things as Heracleitus did, or with Aristotle to limit this change to the world beneath the moon (cf. p. 200).

In their views on the structure of the universe they adhered to the prevailing notions. They regarded the stars as fixed in their spheres; their fire was nurtured by exhalations from the earth and the waters; their divinity and rationality were derived from the purity of this fire. The whole realm of nature is divided into four classes; which are distinguished in such a manner that inorganic things are kept together by a simple ἕξις, plants by φύσις, animals by a soul, men by a rational soul.

Among these creatures man only has a higher interest for our philosophers, and in man the soul. The soul, like all that is real, has a corporeal nature;

it comes into being with the body in the physical mode of generation ; but the material is the purest and noblest, a part of the divine fire which descended into the bodies of men when they first arose out of the æther, and passes from the parents to the children as an offshoot of their souls. This fire of the soul is nourished by the blood, and the governing part of the soul (the ἡγεμονικόν) has its seat in the heart, the centre of the course of the blood (according to Zeno, Cleanthes, Chrysippus, &c., from whom only a few authors deviate). From hence seven offshoots spread out, viz. the five senses, the power of speech and of procreation, to their corresponding organs. But the seat of personality lies only in the governing part or reason, to which belong both the lower and the higher activities of soul, and in its power lies the assent to conceptions, as well as to conclusions of will—both only in the sense which the Stoic determinism allows (cf. p. 242). After death, all souls, according to Cleanthes, but according to Chrysippus only those who had obtained the necessary force, the souls of the wise, continue till the end of the world, in order to return at that time into the Deity. But the limited duration of this continued life did not deter the Stoics, and Seneca especially, from describing the blessedness of the higher life after death in colours not unlike those of Plato and the Christian theologians.

§ 71. *The Stoic Ethics : their general traits.*

If everything obeys the laws of the universe, man only is qualified by his reason to know them and follow them consciously. This is the leading thought

of the Stoic doctrine of Ethics. Their supreme principle is in general the life according to nature—*ὁμολογουμένως τῇ φύσει ζῆν*. That this principle was not thus formulated till the successors of Zeno, while he required only *ὁμολογουμένως ζῆν*, the life consistent with itself (Arius Did. in Stob. 'Ecl.' ii. 132), is the more improbable as Diog. vii. 87 definitely states the contrary, and even Polemo, Zeno's teacher, had required a life according to nature (p. 169). If Cleanthes named the nature to which our lives are to correspond *κοινὴ φύσις*, and Chrysippus called it universal and more especially human nature, the correction is chiefly verbal. The most universal impulse of nature is in every creature the impulse to self-preservation; only what serves this end can have a value (*ἀξία*) and contribute to its happiness (*εὐδαιμονία, εὔροια βίου*). Hence for a rational being that only has a value which is in accordance with nature; for it virtue only is a good, and in virtue alone consists its happiness, which consequently is not connected with any further condition (virtue is *αὐτάρκης πρὸς τὴν εὐδαιμονίαν*). Conversely, the only evil is vice (*κακία*). All else is indifferent (*ἀδιάφορον*); life, health, honour, possessions, &c., are not goods; death, sickness, contempt, poverty, &c., are not evils. Least of all can pleasure be considered a good, or the highest good, and sought for its own sake. Pleasure is a *consequence* of our activity, if this is of the right kind (for doing right ensures the only true satisfaction), but it can never be its *aim*. If all Stoics did not go so far as Cleanthes, who would not have pleasure reckoned among things according to nature, yet all

denied that it had any value by itself. For this reason they sought the special happiness of the virtuous man in freedom from disturbance, in repose of spirit, and inward independence. As virtue alone has a value for men, the effort to attain it is the most universal law of his nature. This conception of law and duty is more prominent among the Stoics than among earlier moral philosophers. But as the rational impulses are accompanied in man with irrational and unmeasured impulses or passions[1] (which Zeno reduced to four main passions—pleasure, desire, anxiety, and fear), the Stoic virtue is essentially a battle with the passions; they are an irrational and morbid element (*ἀῤῥωστήματα*, and if they become habitual, *νόσοι ψυχῆς*); they must not only be regulated (as the Academicians and Peripatetics wished) but eradicated. Our duty is to attain apathy, or freedom from passions. In opposition to the passions, virtue consists in the rational quality of the soul. The first condition is a right notion in regard to our conduct; virtue, therefore, is called knowledge, and want of virtue want of knowledge. But with this knowledge, in the mind of the Stoics, strength of mind and will (*τόνος*, *εὐτονία*, *ἰσχύς*, *κράτος*), on which Cleanthes especially laid weight, is so directly connected that the essence of virtue can be equally well found in it. Zeno considered insight (*φρόνησις*) to be the common root of all virtues; Cleanthes, strength of soul; Aristo, health. From the time of Chrysippus it is usual to seek it in wisdom (*σοφία*) as the science of divine and human things.

[1] *Πάθος*, defined as *ἄλογος ψυχῆς κίνησις*, or *ὁρμὴ πλεονάζουσα*.

From wisdom four cardinal virtues were thought to arise, which were in their turn variously divided: insight, bravery, self-control (σωφροσύνη), and justice. Cleanthes, however, put endurance (ἐγκράτεια) in the place of insight. According to Aristo (and in reality according to Cleanthes also), the different virtues are distinguished only by the objects in which they express themselves; but Chrysippus and later writers assume internal and qualitative differences between them. Yet they adhered to the principle that as expressions of one and the same feeling they were indissolubly connected; where one virtue is, of necessity all must be; and similarly where one vice is, all must be. Hence all virtues are equal in merit, all vices in depravity. It is, in fact, merely a matter of feeling; this alone makes the fulfilment of duty (καθῆκον) a virtuous action (κατόρθωμα); the form in which it is expressed is indifferent. This feeling, according to the Stoic belief, must be altogether present or not present at all. Virtue and vice are qualities which admit of no difference of degree (διαθέσεις—not merely ἕξεις); there is nothing intermediate between them; no man can possess them in part; he must either have them or be without them; he must be virtuous or vicious, a sage or a fool, and therefore the change from folly to wisdom is momentary; while proficients (προκόπτοντες), men are still fools. The wise man is the ideal of all perfection, and as this is the only condition of happiness, he is the ideal of all happiness, while the fool is the pattern of all vice and misery. The first, as the Stoics set forth with declamatory pathos, is

alone free, alone beautiful, rich, happy, &c. He possesses all virtues and all knowledge; in all things he does what is right and he alone does it; he is the only real king, statesman, poet, prophet, pilot, &c. He is entirely free from needs and sorrows, and the only friend of the gods. His virtue is a possession which cannot be lost (or at most, as Chrysippus allows, through disease of mind); his happiness is like that of Zeus, and cannot be increased by duration. The fool, on his part, is thoroughly bad and miserable, a slave, a beggar, a blockhead; he cannot do what is right, or anything that is not wrong; all fools are lunatics (*πᾶς ἄφρων μαίνεται*). But, in the belief of the Stoics, all men, with few exceptions, and those rapidly disappearing, are fools. Even to the most celebrated statesmen and heroes at most the inconsistent concession is made that they are afflicted with the common vices of mankind to a less degree than other people.

In all this the Stoics are essentially followers of the principles of Cynicism, with the alterations which arose from the more scientific establishment and exposition of their principles. Yet Zeno could not hide from himself that these doctrines required considerable limitations and modifications. These modifications were not only the condition on which they could pass beyond the narrow limits of a sect, and become an historical power; they arose out of the common presuppositions of the Stoic ethics. A system which in practice recognised harmony with nature, and in theory universal conviction, as the standard, could not place itself in such striking contradiction to either, as

Antisthenes and Diogenes had done without scruple. Hence, in the doctrine of goods, three classes are distinguished among morally indifferent things; those which are according to nature and therefore have a value (*ἀξία*) being desirable and preferable (*προηγμένα*) in themselves; those which are against nature, and therefore without value (*ἀπαξία*) and to be avoided (*ἀποπροηγμένα*); and finally those which have neither merit nor demerit, the *ἀδιάφορα* in the narrower sense. Aristo, who contested this division, and saw the mission of man (*τέλος*) in entire indifference to goods, by thus returning from Zeno to Antisthenes drew upon himself the reproach that he made all action on principle impossible. Herillus, it is true, deviated from Zeno in maintaining that a part of things morally indifferent, though it could not be referred to the final object of life (*τέλος*), could yet form a subordinate and separate object (*ὑποτελίς*). Only by this modification of their doctrine of goods was it possible for the Stoics to gain a positive relation to the purposes of practical life, but it cannot be denied that they frequently made a use of it which it is impossible to harmonise with the strictness of the Stoic principles. In connection with the relation to what is desirable or the reverse stood the conditioned or 'intermediate' duties (*μέσα καθήκοντα*), which are distinguished from the perfect (*κατορθώματα*). In all these it is a question of rules which lose their force under certain circumstances. As, moreover, a relative valuation of certain *ἀδιάφορα* is allowed and even required, so also is the apathy of the wise man softened to the degree

that it is allowed that the beginnings of the passions are found even in him, though they do not win his assent, and certain rational emotions (εὐπάθειαι) are found in him only. Finally, the less that the Stoics ventured to name any one in their midst a wise man, the more doubtfully that many among them expressed themselves in this respect with regard to Socrates and Diogenes, the more unavoidable was it that the men who were 'Proficients' should find a place in ever increasing importance between the fools and the wise, until at length they are hardly distinguishable from the wise in the Stoic descriptions.

§ 72. *Continuation. Applied Morals. The Relation of Stoicism to Religion.*

If discussions on separate moral relations and duties occupy universally a large space in the post-Aristotelian period, the Stoics (with the exception of Aristo, cf. p. 233) are more especially inclined to them. They appear to have had a peculiar predilection for the casuistical questions to which the collision of duties gives rise. Important as discussions of this kind were for the practical influence of Stoic ethics, and for the spread of purer moral conceptions, their scientific value was not very great, and the treatment appears at times to have been very trivial. So far as we know them, they are characterised by a double effort: on the one hand, they tend to make the individual independent of everything external in his moral self-certainty; on the other, to be just to the duties which arise out of his relation to the greater whole of which

he is a part. In the first sphere lie the traits which mark Stoicism as a descendant of Cynicism; in the second, those by which it surpassed and supplemented Cynicism. Perfect independence of everything which does not influence our moral nature, elevation above external relations and bodily conditions, the self-sufficiency of the wise, the freedom from needs such as Diogenes enjoyed, is also an ideal of the Stoics. If the cynical mode of life is not generally required, yet it is found worthy of the philosopher in case circumstances allow it. The principle that the moral character of actions depends only on the feelings, and not on the external act, misled the Stoics, as it misled their predecessors, into many strange and one-sided assertions, though the most repellent objections brought against them in this respect are in part purely hypothetical, and in part appear to have been put forward as a deduction from views which they controverted. Finally, in order to secure for men their independence under any circumstances, they permitted voluntary departure from life (ἐξαγωγή). This was not only a refuge from extreme distress, but they saw in it the noblest preservation of moral freedom, a step by which a man proved that he regarded life among things indifferent, and which he is justified in taking whenever circumstances make it appear to be more in accordance with nature that he should leave his earthly life than remain in it. Zeno, Cleanthes, Eratosthenes, Antipater, and many other Stoics, ended their lives in this manner.

Independently as the Stoic confronted everything which is not himself, he nevertheless felt himself closely

connected with his kind. By virtue of his rationality man feels himself a part of the universal whole, and he is thus pledged to work for this whole; he knows that he is naturally akin to all rational beings, looks on them all as homogeneous and having equal rights, and standing under the same laws of nature and reason; and he regards it as their natural aim to live for one another. Thus the impulse to society is founded immediately on human nature, which requires the two primary conditions of society, justice and humanity. Not merely all wise men, the Stoics say, are friends by nature, they ascribe universally so high a value to friendship that they do not succeed in bringing their principles of the self-sufficiency of the wise entirely into harmony with this need of friendship. All the other connections of men are also recognised by them as having a moral importance. They recommend marriage, and would have it carried out in a pure and moral spirit. If they could not take any hearty part in politics, yet in the philosophical schools of later antiquity it was the Stoics who occupied themselves most minutely with the duties of civic life, and who trained the largest number of independent political characters. In their view, it is true, the connection of a man with the whole of humanity was more important than the connection of the individual with his nation. Cosmopolitanism took the place of politics, and of this the Stoics were the most zealous and successful prophets. Since it is the similarity of reason in the individuals on which all community among men rests, the two must be co-extensive. All men are akin. They have all a similar origin and the same

mission. All stand under one law, are citizens of one state, members of one body. All men as men have a claim to our beneficence. Even slaves can claim their rights at our hands, and show themselves worthy of our respect. Even to our enemies we, as men, owe clemency and ready support. This last point is often and earnestly insisted upon among the Stoics of the Roman times.

When this connection of all rational beings is carried further we attain to the conception of the world as a community consisting of gods and men.[1] To the laws and arrangements of this community unconditional subjection is demanded. It is in this obedience to the laws of the universe, and submission to destiny, upon which the Stoics are never weary of insisting, that the essential part of religion lies from their point of view. Piety is the knowledge of the worship of the gods (*ἐπιστήμη θεῶν θεραπείας*, Diog. vii. 119 ; Stob. 'Ecl.' ii. 106). But in its essence worship of the gods consists in correct notions about them, in obedience to their will, and imitation of their perfection (Sen. 'Ep.' 95. 47, Epict. 'Man.' 31. 1), in purity of heart and will (Cic. 'N. D.' ii. 28, 71 ; Sen. 'Fr.' 123) ; in a word, in wisdom and virtue. True religion is not distinguished from philosophy. With regard to anything further which was contained in the national religion the Stoics had much to say. The impropriety of the anthropomorphic belief in deities, the unworthy character of

[1] *Σύστημα ἐκ θεῶν καὶ ἀνθρώπων καὶ τῶν ἕνεκα τούτων γεγονότων* (Diog. vii. 138; Stob. 'Ecl.' i. 444 after Posidonius and Chrysippus) : *πόλις ἡ συνέστηκεν ἐξ ἀνθρώπων τε καὶ θεῶν* (Muson. ap. Stob. 'Floril.' 40. 9).

the mythical narratives about gods and heroes, the inanity of the traditional ceremonies, are condemned from the time of Zeno by older and younger members of the school, and by no one more severely than Seneca of the authors known to us. Yet the Stoics as a whole are not opponents, but defenders of the national religion, partly, as it seems, because they find a proof of its truth in its general recognition, partly and more especially because they were unwilling to withdraw from the mass of men a support of morality which for them was indispensable. Philosophical theology was thought to form the proper contents of mythology. In the gods of mythology the one god of the Stoics was to be worshipped directly or indirectly; directly under the form of Zeus, and indirectly under the form of the other gods so far as these are nothing but representatives of divine powers, which manifest themselves to us in the stars, the elements, the fruits of the earth, in great men and benefactors of mankind. The means adopted by the Stoics to prove this philosophic truth (*φυσικὸς λόγος*) in the myths was *allegorical interpretation*. Hitherto this mode of interpretation is only found in isolated instances; but by the Stoics, and so far as we know by Zeno, it was made into a system, while Cleanthes and Chrysippus applied it to such an extent and with such incredible caprice and tastelessness, that they could hardly be surpassed in this respect by their successors on heathen, Jewish, and Christian ground. Prophecy, to which they ascribed the greatest value, was treated in the same spirit by Zeno, Cleanthes, Sphærus, and especially by Chrysippus and his successors.

What was irrational was artificially rationalised; by means of the interconnection of all things (*συμπάθεια*, p. 242), future events could be announced by certain natural signs which could be known and explained partly through natural gifts arising from the relationship of God and man, and partly through scientific observation. No narrative of fulfilled predictions was so marvellous or poorly supported that it could not be justified in this manner. Hence the Stoics, perhaps before Panætius, distinguished a triple theology: that of the philosophers, that of the statesmen, and that of the poets; and against the last, which is in truth nothing but the mythology of the national religion, they brought the most serious objections. Yet this did not deter them from repressing vigorously any serious attack on the popular religion. This is proved by Cleanthes' relation to Aristarchus of Samos, and the severity of Marcus Aurelius towards the Christians.

II. The Epicurean Philosophy.

§ 73. *Epicurus and his School.*

Epicurus, the son of Neocles the Athenian, was born in Samos in December 342 or January 341 B.C. Introduced to the doctrine of Democritus by Nausiphanes, and instructed by Pamphilus the Platonist, he came forward as a teacher in Colophon, Mitylene, and Lampsacus, and after 306 B.C. in Athens. Here his garden was the meeting-place of a circle which was filled with the deepest admiration for Epicurus and his teaching, and united intimate social intercourse with philo-

sophic studies. Women as well as men belonged to it. His doctrines were embodied in a number of treatises, to the style of which he devoted little care.[1] When he died, in 270 B.C., Hermarchus undertook to be leader of the society; Metrodorus, the favourite disciple of Epicurus, and Polyænus had died before their master. Next to these we may mention among Epicurus' personal disciples Colotes, and Idomeneus, the historian. Polystratus also, the successor of Hermarchus, may have belonged to them. Polystratus was succeeded by Dionysius, whose successor was Basilides. Protarchus of Bargylium appears to have belonged to the second quarter of the second century, Demetrius the Laconian and Apollodorus (*ὁ κηποτύραννος*) to the third. The school became widely spread in the Roman world, in which, about the middle of the second century B.C., C. Amafinius met with approval with his Latin exposition of the Epicurean doctrine. The pupil and successor of Apollodorus, Zeno of Sidon, taught with great success in Athens down to 78 B.C. His fellow-disciple and later successor Phædrus was heard by Cicero at Rome as early as 90 B.C. Phædrus was followed by Patro at Athens; in Rome, Siro (Sciro) the teacher of Virgil was busy about 50 B.C. and Philodemus, of whose writings many were found in Herculaneum. To the same period belongs the poet of the school, Lucretius Carus (apparently 94-54 B.C.). Numerous other names of Epicureans are known to

[1] We possess (through Diog. x. 35 ff., 84 ff., 122 ff., 139 ff.) three didactic letters and a sketch of the ethics (the *κύριαι δόξαι*), also a number of Herculanean fragments especially from the *Physics*, and other fragments in Plutarch, Cicero, Seneca, and others.

us; the school, the spread of which is proved by Diog. x. 9, about 230 A.D., and by Lactantius, 'Inst.,' iii. 17, about 320 A.D., became extinct in the fourth century. But its capacity for scientific development was small, and if Epicurus was at pains to keep his pupils strictly to the letter of his doctrines (Diog. x. 12 etc.), he succeeded so well that none of them is known to have made any attempt worth mentioning towards their development.

§ 74. *The Epicurean System. The Canonic.*

With Epicurus far more exclusively than with Zeno his philosophic system is simply a means for practical objects.[1] He cared little for learned investigation and the mathematical sciences, to which he objected that they were useless and did not correspond to reality; and indeed his own education in both respects was very insufficient. Even in dialectics he ascribed a value only to the inquiries into the criterion. This part of his system he called the Canonic. Physics in his opinion are only needed because the knowledge of natural causes frees us from the fear of the gods and death, and a knowledge of human nature shows us what we ought

[1] Our sources for the knowledge of it, besides the writings and fragments mentioned in the previous note, are: Lucretius, *De Rerum Naturâ*, who seems to keep entirely to the physics of Epicurus; the writings of Philodemus found in Herculaneum, so far as they have been deciphered and published; the fragments of Metrodorus, Colotes, &c., Diog. x. 28 ff.; and the information which we owe to Cicero, Plutarch, Sextus Empiricus, Seneca, Stobæus, and others.

to desire or avoid. Hence this part of philosophy also has no independent importance.

If with the Stoics empiricism and materialism are connected with practical onesidedness, the same connection is still more strongly marked in Epicurus. It is entirely in the spirit of an ethical system, which regards the individual in himself only, that the material Individual is looked upon as the originally Real, and sensuous perception as the source of our presentations. If man finds his highest mission in preserving his individual life from disturbance, he must not seek in the universe for the traces of a reason, on which he had to support himself and to whose laws he must become subject. Nor must he make any attempt to secure a theoretic basis for his conduct by a knowledge of these laws. The world presents itself to him as a mechanism; within this he arranges his life as well as he can, but he need not know more of it than that upon which his own weal or woe depends. For this experience and natural intelligence appear to be sufficient without much logical apparatus.

Agreeably with this point of view Epicurus in his Canonic primarily regards perception as the criterion of truth in theory, and in practice (see § 76) the feeling of pleasure and pain. Perception is the Obvious (ἐνέργεια) which is always true; we cannot doubt it without rendering knowledge and action impossible (p. 237). Even the deceptions of the senses prove nothing against it, for in them the fault lies, not in the perception, but in the judgment. The picture which we believed that we saw has really touched our

soul, but we have not the right to assume that an object corresponds to it. (How we are to distinguish those pictures to which there is a corresponding object from those to which no object corresponds, we are not told.) Out of perceptions arise concepts (*προλήψεις*), since that which is repeatedly perceived becomes stamped upon the memory. As these concepts relate to earlier perceptions, they are always true; hence beside perceptions (*αἰσθήσεις*) and feelings (*πάθη*) concepts can be counted as criteria. And as even the presentations of the fancy arise, according to Epicurus, by the operation of objective pictures present to the soul (cf. p. 262), these also are included in criteria. It is only when we pass beyond perception as such, and form, from what we know, an opinion (*ὑπόληψις*) on what we do not know, that the question arises whether this opinion is true or false. In order to be true, an opinion, if it refers to coming events, must be confirmed by experience; if it refers to the secret causes of phenomena, it must not be contradicted by them. Epicurus, in Diogenes, x. 32, mentions four ways by which we pass from perceptions to suppositions (*ἐπίνοιαι*); but we must not look for a scientific theory of induction (as Philodemus shows us, *περὶ σημείων*) in him or in his school.

§ 75. *The Physics of Epicurus. The Gods.*

Epicurus' view of the world was in the first instance determined by the desire to exclude the interference of supernatural causes from the world. Such an interference must deprive man of all inward security

and keep him in constant fear. This result the philosopher hopes to obtain most certainly by a purely mechanical explanation of nature. When he looked for such among the older systems (for he was neither inclined nor qualified to form a theory of his own in natural science) none corresponded to his object more completely than that which seemed to afford the best points of connection with his ethical individualism—which had first attracted him, and was perhaps alone accurately known to him. This was the atomism of Democritus. Like Democritus, Epicurus explains the atoms and the void as the primary elements of all things. He takes the same view of the atoms as Democritus, only he ascribes to them a limited, not an infinite variety of shapes. By virtue of their weight the atoms descend in empty space; but as they all fall with equal rapidity (as Aristotle pointed out) and hence cannot dash upon one another, and also because such an assumption seemed necessary for the freedom of the will, Epicurus assumed that they deviated at will to an infinitesimal degree from the perpendicular line. Hence they dash on one another and become complicated, rebound, are partly forced upward, and thus give rise to those circular movements which create innumerable worlds in the most different parts of endless space. These worlds, which are separated by portions of merely empty space (μετακόσμια, *intermundia*), present the greatest variety of conditions; but they have all arisen in time, and with time they will again pass away.

As the origin of the world is said to have been brought

about by purely mechanical causes, so Epicurus ascribes the greatest value to the fact that every individual thing in the world is to be explained in a purely mechanical manner and to the exclusion of all teleological points of view. But how we explain it is a matter of little importance. If we can only be certain that something has its natural causes, it matters little what the causes are. For the explanation of separate phenomena of nature Epicurus leaves us the choice of all the possible hypotheses, and does not absolutely reject such obvious absurdities as that the moon really waxes and wanes. That the sun is no larger, or but a little larger, than it seems to be, was persistently maintained by his school, no doubt in order that the credibility of the senses might not be impaired.

Living beings were thought to come originally from the earth. In the first instance there were among them many marvellous forms, but only those which were capable of life have been preserved (cf. p. 74). In regard to the early condition and the gradual development of man we find attractive and intelligent suppositions in Lucretius (v. 922 ff.). The soul of animals and men consists not only of elements of fire, air, and breath, but also of a peculiar matter, yet more delicate and mobile, which is the cause of perception, and is derived from the souls of the parents. But in men a rational part is added to the irrational part of the soul, which (like the Stoic *ἡγεμονικόν*) has its seat in the breast, while the other permeates the whole body. At death the atoms of the soul are scattered, since they are no longer held together by the body.

This to Epicurus is a great comfort, for only the conviction that we do not exist after death can set us free from the fear of the terrors of Hades. Of the activities of soul, not only are perceptions explained (with Democritus) by a contact of the soul with the pictures (εἴδωλα) which are given off from the surface of bodies and reach the soul through the senses, but the same explanation is given of the presentations of the fancy (φανταστικαὶ ἐπιβολαὶ τῆς διανοίας). In the latter, however, the soul is touched by pictures of which the objects are no longer in existence, or which have first formed themselves in the air from the commingling of different idola, or from new combinations of atoms. Through the movements which the pictures create in the soul, when forcing themselves into it, earlier movements of the soul are awakened anew, and this is recollection. From the combination of a picture of recollection with a perception arises opinion, and with it the possibility of error (p. 259). The will consists in motions which are brought about in the soul by presentations, and pass from it to the body. The freedom of the will, in the sense of pure indeterminism, was strongly maintained by Epicurus, who also vigorously controverted the Stoic fatalism. Of any deeper psychological investigations into this point we find no trace in him.

By these physics Epicurus hopes to have removed for ever the fear of the gods as well as the fear of death. It is true that he will not attack the belief in the gods. The universality of this belief seems to him a proof that it is founded on real experience, and the

pictures, from the appearance of which he can only explain it (see above), arise, at least in part, from real beings, and are perceptions, not merely pictures of imagination. Moreover, he feels the necessity of seeing his ideal of happiness realised among the gods. But he can only share the prevailing notions about the gods to a limited extent, for he is distinctly opposed to the relation in which they stand to the world. He assumes a plurality of gods—in fact he regards them as innumerable; and he also considers it as self-evident that they should have the shape of man, as the most beautiful that can be conceived. He also attributes to them the distinction of sex, the need of food, and language, even the Greek language. But the happiness and immortality of the gods, the two leading marks of his conception of deity, require in his opinion that they should have fine bodies of light instead of our coarse bodies, and live in the intermundia, for in any other case they would be affected by the decay of the worlds in which they dwelt, and disturbed in their happiness by the prospect of this misfortune. Their happiness also requires that they should not be burdened with the care of the world and men, which the belief in providence lays upon them. Still more indispensable is this assumption for the repose of man, who has no more dangerous enemy than the opinion that higher powers interfere in the world. Epicurus is therefore the most pronounced opponent of this belief in any form. He can only derive the national religion from uncertainty and, above all, from timidity; and he finds the Stoic doctrine of providence and

destiny, which are contradicted by the actual nature of the world, even more comfortless than the absurdities of mythology. That he has freed men from this delusion, from the fear of the gods (*religio*), which oppressed them, is extolled as his immortal service by his admirers (as Lucretius, i. 62 ff.), while on the other hand, they commend his piety and his participation in the traditional worship of the gods.

§ 76. *The Ethics of Epicurus.*

As Epicurus in his Physics explained the atoms as the source of all being, he regards the individual in his Ethics as the aim of all action. The measure (*κανών*) for distinguishing good and evil is our feeling (*πάθος*, p. 259). The only absolute good is pleasure, after which all living things strive; the only absolute evil is pain, which all avoid. Hence in general Epicurus, like Aristippus, regards pleasure as the final object of our action. Yet by pleasure he does not mean the individual sensations of pleasure as such, but the happiness of an entire life. Our judgment must decide on separate enjoyments or pains by their relation to this. Further, he believes that the real importance of pleasure consists only in the satisfaction of a need, and hence in the removal of what is not pleasurable; our final object is not positive pleasure, but freedom from pain; not the motion, but the repose of the spirit. As the most essential conditions of this repose lie in the state of our feelings, Epicurus regards the pleasures and pains of the mind as far more im-

portant than those of the body. For however publicly and plainly he declares (in spite of some different expressions) that all pleasure and pain arise in the last resort from bodily conditions, yet he observes that only present delights and pains act upon the body, whereas the soul is moved by those of the past and the future. These feelings, which rest upon memory, hope, and fear, are in his view so much the more violent that he feels himself justified in extolling the absolute power of the spirit over bodily pains with the same exaggeration as the Cynics and Stoics. The severest pains are only of short duration and quickly put an end to our life; the less severe can be borne and overcome by superior intellectual enjoyments.

Virtue is only a condition of repose of mind, but it is so indispensable a condition that, even according to Epicurus, happiness is indissolubly connected with virtue, however small the independent value which his system allows us to attribute to it. Insight frees us from the prejudices which disturb us, from empty fancies and wishes; it teaches us the true art of life. Self-control preserves us from sorrows by correct conduct in regard to pleasure and pain, bravery by the contempt of death and suffering; to justice we owe it that no fear of punishment disturbs our equanimity. Epicurus himself led a pattern life, and his sayings frequently exhibit a purity of sentiment which goes far beyond their unsatisfactory scientific foundation. His ideal of the wise man approaches closely to the Stoic. If he does not ascribe to him either the Stoic apathy or their contempt of sensual enjoyment, yet he repre-

sents him as so completely master of his desires that they never lead him astray. He describes him as so independent of all external things, his happiness as so complete, and his wisdom as so inalienable, that he can say of him no less than the Stoics of their ideal, that he walks as a god among men, and even on bread and water he need not envy Zeus.

In harmony with this ideal Epicurus' rules of life aim in the first instance at procuring for the individual, as such, a contented and independent existence by liberating him from prejudices and controlling his desires. Living himself an unusually moderate and contented life, he urges others to contentment. Even of actual desires only a part aims at what is necessary; by far the greatest portion seeks what is unnatural and useless. Among the latter Epicurus especially places the desire for honour and glory. Hence he does not require the suppression of the sensual impulses; he will not forbid a rich enjoyment of life, but all the more vehemently does he insist that a man shall not make himself dependent on these things. The point is not to use little, but to need little. A man is not to bind himself absolutely even to life. Epicurus allows him to withdraw himself from intolerable miseries by a voluntary death, though he is of opinion that such miseries rarely happen.

It was more difficult for Epicurus to establish the necessity and importance of the social life of man. Here his system opened but one path—the consideration of the advantages which accrue to men from their union with one another. Even these the philosopher,

to whom freedom from trouble is the highest good, seeks rather in protection against injuries than in any positive advancement of the individual by moral communion with others. With him this holds good especially of the State. The aim of all laws is the security of society against injustice. It is only the wise who, being convinced of its harmfulness, refrain from injustice voluntarily; the mass of men must be deterred from it by punishment. To enjoy this security without being disturbed in it by the trouble and danger, from which a statesman cannot withdraw himself, appeared to the philosopher as the most desirable object. Hence he recommends obedience to the laws, because a man who breaks them can never be free from the fear of punishment; but he considers it better to hold aloof from all public life unless special circumstances require the contrary. His motto is *λάθε βιώσας*. He has doubts even about family life and marriage. The more lively, both in him and his school, was the feeling for friendship. If it seems inadequate to establish this relation only on the value of the mutual support and the feeling of security which arise from it, yet, in fact, he went far beyond these limits. The Epicurean friendships were famous, like the Pythagorean, and the supposed Pythagorean community of goods was only rejected by Epicurus because such an arrangement ought not to be required among friends. But it would not have been in harmony with the principles of Epicurus to limit his beneficence to the circle of his personal friends. In him and in many men of his school a mild and philanthropic temper

towards all the world is present. In his own conduct this is expressed in the saying (among others), that it is more pleasant to do a kindness than to receive one.

III. Scepticism.

§ 77. *Pyrrho and the Pyrrhonians.*

The foundation of the Pyrrhonic School took place somewhat earlier than that of the Stoic or Epicurean. In its practical aim it approaches the Stoic, but it seeks to attain it not by definite scientific conviction, but, on the contrary, by despair of any such conviction. Pyrrho of Elis had apparently become acquainted with the doctrines of the Elean-Megarian school when with Anaxarchus (p. 83) he accompanied Alexander to the East. At a later time he founded a school of his own in his native city, where he lived universally honoured, though in poor circumstances. The school did not spread widely. He lived to be nearly ninety years of age, and seems to have died about 270–5 B.C. He left no writings behind him; even in antiquity his doctrines were only known by the treatises of his pupil, Timon of Phlius, who subsequently lived in Athens and there died, also about ninety years old, after 241 B.C.

In order to live happily a man ought, according to Timon (*ap.* Euseb. 'Pr. Ev.' xiv. 18) to be clear on three matters: What is the nature of things, How we are related to them, and What we can gain from this relation.'

To the first two of these questions we can only answer, that the nature of things is quite unknown to

us, for perception only shows us things as they appear, and not as they are, and our opinions are entirely subjective; that we can never maintain anything (*οὐδὲν ὁρίζειν*); never ought to say 'this is so,' but only 'this seems to me so'; and that a suspension of judgment (*ἐποχή, ἀφασία, ἀκαταληψία*) is the only correct attitude towards things. If we observe this attitude, the result, in Timon's belief, is at once *ἀταραξία*, or apathy. He who has despaired of knowing anything of the nature of things cannot attribute a higher value to one thing than another; he will not believe that anything is in itself good or bad, but these conceptions are rather to be referred to law and custom. Indifferent to all other things, he will strive after the correct mood of temper, or virtue, and thus find happiness in tranquillity. So far as he is compelled to act, he will follow probability, nature, and custom. Pyrrho does not seem to have gone further into detail in the scientific establishment of these doctrines; the ten Sceptic 'tropes,' which later writers ascribe to him, are certainly to be ascribed to Ænesidemus (§ 88). Some pupils of Timon are mentioned, and again a pupil of one of Timon's pupils. But this was the last offshoot of the Pyrrhonic Scepticism; its place was taken after the middle of the third century by the Academic.

§ 78. *The New Academy.*

The philosopher who led the Academy in this new path was Arcesilaus of Pitane in Æolia (315–241–0 B.C.) the successor of Crates (p. 169). We are only im-

perfectly acquainted with his doctrines, and as he wrote nothing, even the ancients only knew them at third hand. According to Cicero, 'De Orat.' iii. 18, 67, he controverted the possibility of knowing anything by the senses or the reason (*sensibus aut animo*); but the main object of his attacks was Zeno's doctrine of presentation by concepts. His chief objection, beside some more formal criticisms, was his opinion that there were no presentations which contained in themselves a certain mark of their truth, and this opinion he attempted to prove by various applications. He also seems to have controverted the Stoic physics and theology. In consequence he maintained with Pyrrho that there was nothing left but suspension of judgment (ἐποχή). This point of view he upheld so strictly that he would not allow even that principle to be asserted as knowledge. For this reason it is the more incredible that his scepticism was intended to serve only as a preparation for the Platonic dogmatism. But he did not allow that the possibility of action must be given up with the possibility of knowledge. The presentation sets the will in motion, even though we do not consider it knowledge, and in order to act rationally it is sufficient to follow reason, which forms the highest criterion for practical life.

Arcesilaus was succeeded in the chair by Lacydes of Cyrene. Before his death the latter handed over the headship of the school (215–4 B.C.) to the Phocæans Telecles and Evander, who were followed by Hegesinus (Hegesilaus). But neither of these nor of the rest of the Academicians who are mentioned from

this period, do we know more than the general fact that they remained true to the direction struck out by Arcesilaus. The greater is the importance of Carneades, who on this account is called the founder of the third or new Academy, while Arcesilaus is regarded as the founder of the second or middle school, Philo and Antiochus (§ 81) of the fourth and fifth. This acute and learned man, who was also famous for the persuasive force of his eloquence, was born in Cyrene in 213–214 B.C., and became leader of the school long before 156 B.C. when he came with the embassy of philosophers to Rome (p. 226), and he remained leader with great success and honour till his death in 129 B.C. He left no writings; the exposition of his doctrines was the work of his pupils, especially of Clitomachus. The teaching of Carneades marks the culmination of Academic scepticism. If Arcesilaus had chiefly directed his attacks against the Stoic doctrine of the criterion, Carneades also treats the Stoics, who were the most eminent dogmatists of the time, as his chief opponents. But he investigated the question of the possibility of knowledge on wider grounds, and subjected the views of the various philosophers to a more comprehensive and penetrating criticism than his predecessors, while at the same time he defined more precisely the degrees and conditions of probability. First he asked in general terms whether knowledge was possible. This question he believed that he must answer in the negative, because, (as he proved more in detail) there is no kind of conviction which does not deceive us, no true presentation to which there is not

a false one precisely similar. Hence there is no criterion of truth in the sense of the Stoic 'presentation in concepts.' In like manner he denied the possibility of demonstration, partly because this could only be done by proof, and hence by a *petitio principii*, partly because the premisses of the proofs require proof in turn, and so on *ad infinitum*. He examined the philosophic systems more in detail, and especially controverted the Stoic theology on every side. If the Stoics inferred the existence of God from the teleological arrangement of the world, Carneades rejected the soundness of this conclusion, as well as the correctness of the presupposition on which it rests, on the ground of the numerous evils existing in the world. He even attacked the conception of God by attempting to show with great acuteness, and in so far as we know for the first time, that the Deity cannot be thought of as a living rational creature (ζῷον λογικόν) without attributing to it qualities and circumstances, which are at variance with its eternity and perfection. But we can here only touch upon his criticism of polytheism and his attacks on the Stoic belief in prophecy, with which is connected his polemic against the Stoic determinism. A still greater impression appears to have been produced by his criticism of moral notions, of which a sample was given in his two lectures, for and against justice, delivered at Rome. For this, following the pattern of the sophists, he made chief use of the contrast of natural and positive right. But our information on this point is very imperfect, and in truth the accounts of Carneades give us no exhaustive

picture of his scientific activity. The final result of his sceptical discussions was naturally that which had been long pronounced: the absolute impossibility of knowledge, and the demand for an unconditional suspension of judgment. If the earlier sceptics had at least recognised probability as the standard for our practical conduct, Carneades pursued the thought yet further. He distinguished three degrees of probability, and consequently three kinds of probable presentations: those that are probable in themselves, those whose probability is confirmed by others connected with them, and those in which this holds good of the latter presentations also (*φαντασία πιθανή*, *φαντασία πιθανὴ καὶ ἀπερίσπαστος*, and *φαντασία πιθανὴ καὶ ἀπερίσπαστος καὶ περιωδευμένη*), and he appears to have investigated even in details the marks by which we are to decide upon probability. How he treated ethical questions from this point of view we cannot fix with certainty. It is most probable that he adhered to the principle of the Old Academy—the life according to nature—and found virtue in striving after natural goods.

After Carneades the Academy was conducted by his pupils, first the younger Carneades, then Crates—by both for but a few years, and then by the most distinguished of the body, Clitomachus the Carthaginian, who cannot have been born after 175 B.C., and died after 110. On his successors cf. § 81.

SECOND SECTION.

ECLECTICISM. RENEWED SCEPTICISM. PRECURSORS OF NEO-PLATONISM.

I. Eclecticism.

§ 79. *Its Origin and Character.*

Vigorous as were the controversies between the philosophic schools of the post-Aristotelian period, it was natural that in the course of years these contrasts should be softened, and the relationship which, in spite of all differences, existed from the first between the Academic, Peripatetic, and Stoic schools should make itself more distinctly felt. For this purpose two factors, operating contemporaneously, were of the utmost importance—the success which the Academic scepticism obtained through Carneades, and the connection into which Greece entered with Rome.

The more seriously the belief of the dogmatic schools in the impregnability of their doctrines had been shattered by the penetrating criticism of Carneades, the more inclined must they have become to return from these distinctive doctrines which were exposed to so many objections, to those convictions upon which men could be essentially in harmony, and which even their critic himself recognised as the standard in practical conduct, and therefore sufficient in the most important matter. On the other hand, the more strongly that even Carneades, in the development of his doctrine of

probability, had expressed the necessity of securing such practical standards for himself, the more easily would his school, in pursuing the same direction, come to lay the chief weight on this part of their doctrine. Thus they departed more and more from scepticism, for that which was to Carneades only probable obtained in time the value of something certainly known.

The Roman spirit which now began to have an influence on Greek science contributed to the same result. After the conquest of Macedonia by the Romans (168 B.C.) Greece was in fact—what it became, more and more, in form—a part of the Roman Empire. Ere long, under the influence of Flamininus, Æmilius Paulus, Scipio Æmilianus, and his friends, there arose a scientific intercourse between Greece and Rome which carried Greek teachers to Rome and young Romans in ever-increasing numbers to the philosophic schools of Athens and other Greek cities. More important than the philosophic embassy (p. 226) was the stay of Panætius (§ 80) at Rome and the contemporaneous spread of Epicureanism among the Romans (p. 256). After the beginning of the last century B.C. Greek philosophy was regarded in Rome as an indispensable part of higher culture. If the Greeks were in the first instance the teachers and the Romans the pupils, yet it was natural that the Greeks should adapt themselves more or less to the needs of their distinguished and influential hearers, and that in their intercourse with the Roman world they should be touched by the spirit which had created it. It was in harmony with this spirit to estimate each view according to its value for

practical life rather than its scientific soundness. Hence these relations must also have contributed to nourish the inclination towards an amalgamation of the philosophic schools, to throw their distinctive doctrines into the background, and bring forward what was common to all, especially in points of practical importance. But in order to be able to choose what is true or probable from different views, not immediately reconcilable, a criterion must be provided for this object, and thus men were finally brought to certain convictions, which it was thought were fixed in us before any demonstration, and which maintained their truth by general recognition, by the *consensus gentium*.

This eclecticism first appeared in the Stoic school; in the sequel it became more prevalent in the Academic, and found an entrance even into the Peripatetic. In the Epicurean school, on the other hand, we cannot find any important deviation from the doctrine of its founder, though Zeno of Sidon, when with Carneades, whom he attended as well as Apollodorus, acquired a more dialectic method than was usual in the school. That the physician Asclepiades of Bithynia (100–50 B.C.), like Heracleides, put original bodies (*ἄναρμοι ὄγκοι*) which were thought to be shattered by collision, in the place of the atoms, is the less important, as Asclepiades, though he approached the Epicurean school, did not belong to it.

§ 80. *The Stoics. Boethus, Panætius, Posidonius.*

Though the Stoic system was brought by Chrysippus to a relative perfection, the Stoics were not so

strictly isolated in the doctrine of their school that they did not allow some deviations from it. Some of these were due to the influence of older systems, others to the wish to meet the attacks of their opponents, and, above all, the incisive criticism of Carneades. Zeno of Tarsus, the successor of Chrysippus, is said to have expressed himself doubtfully about the doctrine of the conflagration of the world, and also Diogenes in his latest years, perhaps because he could not solve the difficulties raised by Boethus and Panætius. But these two pupils of Diogenes deviated far more widely from the old Stoic teaching. Boethus differed not only in his theory of knowledge, inasmuch as he described reason (*νοῦς*), science, and desire as criteria no less than perception, but he also regarded the Deity —which with his school he considered the same as the æther—to be divided in substance from the world. Consequently he would not allow the world to be an animated being ; he merely assumed a co-operation of the Deity with things. In connection with this middle position between Zeno and Aristotle he controverted at length the conflagration maintained by the first, in order to put the eternity of the world in its place.

But the Stoic school of Panætius of Rhodes (approximately between 185 and 110 B.C.) had much greater influence. He was the successor of Antipater at Athens and at the same time the chief founder of the Roman Stoicism, the friend of the younger Scipio Africanus and of Lælius, the teacher of Q. Mucius Scævola, and L. Ælius Stilo, and other Roman Stoics. Preserving the independence of his judgment in

literary and historical criticism, Panætius was a pronounced admirer of Plato and Aristotle. It was the more natural for him to allow their doctrines to have an influence on his own as he seems to have treated the Stoic philosophy from the practical side, and not merely in the severer form of the school. This is seen in his work on duties (*περὶ τοῦ καθήκοντος*), which was the pattern of the Ciceronian 'De Officiis.' With Boethus he controverted the destruction and apparently also the origin of the world, denied the continuance of the soul after death, and distinguished in it, like Aristotle, the vegetable part (*φύσις*) from the animal (*ψυχή*). We cannot assume that in his ethics he contradicted the old Stoic doctrine, though he seems to have laid greater stress on the points in which it deviated from Cynicism and came into contact with Plato and Aristotle. On the other hand, he repeated Carneades' doubts about prophecy, and made a freer application than had hitherto been usual among the Stoics of the division of a triple theology (p. 255), though he was not, perhaps, the first to bring the division forward.

Panætius' most famous pupil was the learned Posidonius of Apamea, who died in Rhodes about 50–46 B.C., at eighty-four years of age, as the leader of a popular school. After him came Hecato, also a Rhodian; his successors in Athens were Mnesarchus and Dardanus (contemporaries), who were apparently followed by Apollodorus. It is only of Posidonius that we have any details. This important and influential Stoic retained the tradition of his school more strictly in many points than Panætius. He defended the

conflagration of the world, the continuance of the soul after death, the existence of demons, and took under his protection the Stoic belief in prophecy to its full extent. On the other hand, he shared Panætius' admiration for Plato, and in order to give a psychological foundation for the contests between reason and the passions, on which the Stoics laid such weight, he followed Plato (p. 154) in assigning the passions to courage and the desires, which were regarded not as separate *parts* of the soul, but as separate *powers* of it depending on the nature of the body—a deviation from the older Stoicism which is not without importance for the subsequent period.

Many other Stoics are known to us from the first century B.C. Such was Dionysius, who lived in Athens about 50 B.C., perhaps as leader of the school; Jason, the grandson and successor of Posidonius, the two Athenodori of Tarsus, of whom one, the son of Sandon, was the instructor of Augustus; Geminus, the astronomer, a pupil of Posidonius; Cato of Utica, the geographer Strabo (58 B.C. to 20 A.D.) and others. But of none of these have we any philosophical treatises, or larger fragments of such treatises than the fragments of Arius Didymus (p. 282). This last-mentioned philosopher is a further example of the echo which the eclectic tendencies of the time found even in the Stoic school.

§ 81. *The Academicians of the Last Century* B.C.

Yet the chief seat of this eclecticism was the Academic school. Even among the personal pupils of

Carneades there were some like Metrodorus of Stratonice, Æschines, and no doubt Charmidas, who abandoned the proposition that things were absolutely unknowable. This was more definitely done by Philo of Larissa (who fled to Rome about 88 B.C., where he was the teacher of Cicero, and appears to have died about 80 B.C.), the pupil and successor of Clitomachus. He not merely made it the object of philosophy to point out the way to happiness to men, but he wished to attain this object by a detailed ethical theory, by controverting false moral conceptions and imparting correct ones (Stob. 'Ecl.' ii. 40 ff.). Thus he could not consistently maintain a point of view which brings into question the truth of all our conceptions. Hence, although he joined Carneades in controverting the Stoic doctrine of the criterion, and regarded an absolutely certain knowledge, a conception of things, as impossible, yet he would not deny all power of knowledge, and maintained that even Arcesilaus and Carneades did not intend to deny it. There was an obviousness (*ἐνάργεια*), which created a perfectly sure conviction, though it did not attain to the absolute certainty of the concept. Thus he sought for something intermediate between mere probability and knowledge.

That such an intermediate position is untenable was recognised by Philo's disciple and successor, the friend of Lucullus, and also one of Cicero's teachers, Antiochus of Ascalon (died 68 B.C.), who finally quarrelled with Philo on this subject. By this Academician, who also attended the Stoic Mnesarchus, the Academy was definitely led from Scepticism to Eclecticism. Among

other objections to Scepticism, he, like the Stoics, indubitably thought it of great weight that without sure conviction no rational conduct of life is possible. Nevertheless, he controverted it on scientific grounds, maintaining that without truth there was no probability; that it was a contradiction to maintain that nothing could be maintained and prove that nothing could be proved, &c.; that it was impossible to speak of false presentations, if the distinction between true and false was denied, &c. But if we ask where is truth to be sought, Antiochus answers: In that upon which all important philosophers are agreed; and in order to prove that there was really such agreement in all more important questions, he sets forth an exposition of the Academic, Peripatetic, and Stoic systems, which was intended to show that these three schools differed from one another in subsidiary points and expressions rather than in essentials. In this, however, he was unable to succeed without much inaccuracy. His own interest lay chiefly in ethics. In these he sought a middle path between Zeno, Aristotle, and Plato; as, for instance, when he said that virtue was indeed sufficient for happiness, but for the highest degree of happiness bodily and external goods were requisite. It was made a reproach against him that he called himself an Academician, but was rather a Stoic. In truth he is neither, but an Eclectic.

After the death of Antiochus, as is shown by Cicero ('Acad.' ii. 4, 11) and Ænesidemus (*ap.* Phot. 'Cod.' 212, p. 170, 14), this mode of thought continued to prevail in the Academy. The head of the school down to

51 B.C. was Aristus, the brother of Antiochus, who was followed apparently by Theomnestus. Ere long, however, the preference for Pythagorean speculation (cf. § 92) was connected with it. Towards the end of the first century B.C. we find this preference in Eudorus, an Eclectic with the ethics of a Stoic, and somewhat later in Thrasyllus (died 36 A.D.). Arius Didymus, the tutor of Augustus, was counted a member of the Stoic school, but the existing portions of his work in which he gave a sketch of the more important philosophical systems, are composed so entirely after the manner of Antiochus that the Stoic and Academician are merely distinguished by name.

The Alexandrian Potamo is also mentioned by Suidas (Ποτάμων) as a contemporary of Augustus, and rightly, in spite of Diog. 'Procem.' 21. This philosopher called his school the Eclectic. What we have of his teaching, which was a superficial combination of the thoughts of others, reminds us chiefly of Antiochus.

§ 82. *The Peripatetic School.*

This Eclecticism was less prevalent among the contemporaneous Peripatetics. Andronicus of Rhodes, who about 65–50 B.C. was at the head of the Peripatetic school at Athens, with the aid of the grammarian Tyrannio, published an edition of the works of Aristotle. He also made researches into their genuineness, and wrote commentaries on some. These publications gave the impulse to that earnest study of Aristotle, to which the Peripatetic school was henceforth dedicated.

It was a necessary result of this occupation with the writings of their founder that views which were not his could not easily be ascribed to him. Yet neither Andronicus nor his disciple Boethus of Sidon (who, by controverting immortality and in other points, represents a naturalistic view of the Peripatetic doctrine) surrendered his own judgment in favour of Aristotle. In the same manner Xenarchus (under Augustus) controverted the Aristotelian doctrine of the æther. Staseas of Naples (first third of the first century B.C.), Aristo, and Cratippus, who passed from the school of Antiochus to the Peripatetic, Nicolaus of Damascus (born about 64 B.C.), and others, are not more particularly known to us as philosophers. Who the Peripatetic was, who (about 50 B.C.) defended the eternity of the world in a treatise which has come down to us in Philo's name with Judaising additions, we do not know.

That even in the Peripatetic school there were some who were prepared to adopt alien elements into the doctrines of Aristotle, is shown by two treatises in our Aristotelian collection—the book 'De Mundo,' and the small tractate on 'Virtues and Vices.' The latter is nearer the Platonic doctrine of virtue than the Aristotelian, but it nevertheless appears to be the work of a Peripatetic. The book 'De Mundo' is from the hand of a Peripatetic who, in any case, wrote after Posidonius, whose meteorology he has freely used. The work chiefly aims at a combination of the Aristotelian theism with the Stoic pantheism by the assumption that God is indeed in his essence outside the world, and far too sublime to occupy himself with it in detail, but, on the other

hand, he fills the whole with his power and operation, and to this extent the predicates, which the Stoics are accustomed to ascribe to him, are essentially his. In this Plato, Heracleitus, and Orpheus agree.

§ 83. *Cicero. Varro. The Sextians.*

The eclecticism of the last century B.C. is expressed in a peculiar manner among the Roman philosophers of this period, of whom M. Tullius Cicero is the most distinguished name in history (106–43 B.C.) He does not owe his prominent position to the acuteness and independence of his own thought, but simply to the skill with which he could set forth the doctrines of the Greeks—superficial as his acquaintance with them was —in a clear and intelligent manner for the contemporary and succeeding generation of Latin readers. Cicero considers himself one of the New Academicians, and gladly follows the school in the habit of discussing both sides of a question without any final decision. But the chief motive of his doubt lies less in the scientific grounds which he borrows from the Academicians, than in the conflict of philosophical authorities; and to the degree that this difficulty can be removed, he is from the first inclined to abandon an attitude of doubt. If, therefore, he believes that he must despair of knowledge in the complete sense, probability attains for him a higher importance than for Carneades; and on the points which have most interest for him, moral principles and the theological and anthropological questions connected therewith, he speaks with great decision. He

is convinced that correct conceptions on these points have been implanted in us by nature; that they can be immediately derived from our own consciousness and confirmed by universal agreement. The views which he acquires on this foundation are neither original nor free from variation. However decisively he opposes Epicureanism in his ethics, yet he fails to find a sound footing between the Stoic and the Academic-Peripatetic doctrines; and while he delights himself with the sublimity of the Stoic principles, he cannot accept the narrow, one-sided views inseparable from them. In theology, he is serious in maintaining the existence and providence of God; in psychology, the immortality of the soul and the freedom of the will; yet he does not venture to pronounce decisively on the nature of God and our spirit; and if in general he places himself on the side of the Platonic spiritualism, he cannot always withdraw himself from the influence of the Stoic materialism. He stands in no intimate relation to the national religion as such, yet in the interest of the community he wishes to retain it, while removing all superstition as far as possible.

Closely connected with Cicero is his friend M. Terentius Varro (116–27 B.C.), who, however, was far more of a scholar than a philosopher. A disciple of Antiochus, whom he has to represent in Cicero ('Acad. Post.'), he follows his lead in ethics (*ap.* Aug. 'Civ. Dei,' xix. 1–3), which he considers the most important part of philosophy; but, like him, he often approaches the Stoics and even the Stoic materialism. In his theology he adheres still more closely to the

Stoics, especially to Panætius, in describing the Deity as the soul of the universe, and worshipping under the gods of polytheism the powers of this soul which operate in various parts of the world. On the other hand, he adopts the division of a triple theology (p. 255), and the sharp polemic against the mythology of the poets. He even publicly disapproved of important parts of the common religion.

An offshoot from the Stoa meets us in the school which was founded about 40 B.C. by Q. Sextius, a Roman of good family, and subsequently conducted by his son, after whom it soon became extinct. A member of this school was Sotion of Alexandria, who about 18–20 A.D. was the teacher of Seneca, Cornelius Celsus, Fabianus Papirius, and L. Crassitius. So far as we know these men, we find them to be moral philosophers who expressly represent the Stoic principles, but they owe the impression which they made rather to the weight of their own personality than to any eminent scientific qualifications. In Sotion we find Pythagorean elements in combination with Stoic. He based the abstinence from animal food, which his master had recommended on general grounds, on the doctrine of the migration of souls. If the Sextians explained the soul as incorporeal, they must have been influenced to some degree by Plato.

§ 84. *The First Centuries* A.D. *The Stoic School.*

The mode of thought which had prevailed in the last century B.C. among the majority of philosophers, with the exception of the Epicureans, was retained

during the centuries immediately succeeding. But more and more there was connected with it a preference for those theological speculations, which finally ended in Neo-Platonism. The separation of the schools not only continued; it was confirmed by the vigorous study of Aristotelian and Platonic writings, and received an official recognition when Marcus Aurelius (176 A.D.) established endowed chairs at Athens for the four leading schools (two, as it seems, for each). But that the same importance was no longer attached to their contrasts as before, is shown directly in the combination of various doctrines which we frequently meet with, and more especially in the wide-spread inclination to return to the practical results of philosophy upon which men would most easily agree, though differing in their scientific views.

Of the numerous Stoics of imperial times whose names are known to us, the following may be mentioned here:—Heracleitus, the author of the Homeric Allegories, which are still in existence, and who was apparently a contemporary of Augustus; Attalus, the teacher of Seneca; Chæremon, an Egyptian priest, the tutor of Nero; Seneca (see *infra*) and his contemporaries, L. Annæus Cornutus of Leptis (from whom we have a treatise on the gods), A. Persius Flaccus, and M. Annæus Lucanus, the nephew of Seneca (39–65 A.D.); Musonius Rufus, and his disciple Epictetus (see *infra*); Euphrates (celebrated by his disciple Pliny the younger), who took poison when he had reached a great age, 118 A.D.; Cleomedes, the author of an astronomical handbook, under Hadrian or

Antoninus Pius; and the Emperor Marcus Aurelius Antoninus. But among these, so far as we know, only Seneca, Musonius, Epictetus, and Marcus exhibit remarkable qualities, while Heracleitus, Cornutus, and Cleomedes merely continued the tradition of their school.

L. Annæus Seneca (born at Corduba soon after the beginning of our era, the tutor of Nero, and for a long time his adviser, with Burrhus, till he put himself to death at the emperor's command, 65 A.D.) did not oppose the doctrine of his school in any important point. Yet if we compare his philosophy with the old Stoic, an altered spirit breathes through it. In the first place, he confines himself essentially to morals. He is acquainted with the Stoic logic, but has no inclination to occupy himself with it in detail. He extols the sublimity of the Physics, and in his *Naturales Quæstiones* he adopts the meteorology of Posidonius, but in this department it is only such theological or anthropological determinations as can be realised in practice which have a deeper interest for him. Without contradicting the Stoic materialism and pantheism, he takes an especial delight in bringing forward the ethical traits of the Stoic idea of God, on which rests the belief in providence. In anthropology also he gives attention to the kinship of the human spirit with God, and the life after death. Yet his moral teaching is not exactly coincident with the old Stoic, whose principles and rules of life he repeats. Seneca is too deeply penetrated with the weakness and sinfulness of men, in his lively descriptions of which

he often strikingly resembles the apostle Paul, to be able to meet moral requirements with the self-confidence of the original Stoicism. As he despairs of finding a wise man in this world or becoming wise himself, he is inclined to lower his demands to the level of men. Earnestly as he demands that by moral labour we should make ourselves independent of all externals, and zealous as are his praises of this independence, he nevertheless frequently ascribes a greater value to external goods and evils than was permitted to the stricter Stoics. If he lays decisive weight on the natural connection of men in the manner of his school, yet each individual state, as compared with the great state of humanity and the world, seems to him less worthy of the notice of the wise man than was the case with the older Stoics. In his cosmopolitanism, the softer traits, sympathy and compassion, are more strongly marked than with them. Lastly, the reflex effect of his morals on his anthropology and his theology is remarkable. The more painfully that he feels the power of sensuality and the passions, the more do we find him, in spite of his materialism, strongly accentuating the opposition of body and soul. In many passages he expresses a yearning for freedom from the bonds of the body, and praises death as the beginning of true life in a manner which is more Platonic than Stoic. For the same reason he distinguishes with Posidonius (and Plato) a rational and two irrational parts in the soul itself (the *principale*, *ἡγεμονικόν*). The higher the value that he ascribes in the battle between reason and sensuality to the thought that this

reason is the divine element in man, its law the will of the deity, the more distinctly must he distinguish the Deity also, as the operative power, from the inert matter. That the Deity receives his true worship only through purity of life and knowledge of God, not by sacrifices, only in the sanctuary of the breast, not in temples, is expressly stated by Seneca, who also, as a worthy representative of Roman Stoicism, attacks in the most relentless manner the improprieties of mythology and the superstition of the existing worship (p. 254).

Musonius Rufus of Volsinii occupied himself even more distinctly with morals—a Stoic who enjoyed great respect as a teacher of philosophy at Rome under Nero and the Flavii. Numerous fragments remain of his lectures, which were preserved by Pollio. According to Musonius, virtue is the only object of philosophy: men are moral invalids; the philosopher is the physician who is to heal them. Virtue is far more a matter of practice and education than of teaching; the disposition to it is born in us and can easily be developed into conviction; the chief matter is the application of this conviction. Hence the philosopher requires few scientific propositions. He ought to show us what is in our power and what is not. But the application of our notions is in our power, and nothing else. On this alone, then, rest our virtue and happiness; everything else is something indifferent, to which we must surrender ourselves unconditionally. In the application of these principles to life we meet with a moral teaching which is pure, and in some points inclining to Stoic sim-

plicity, humane, and gentle even to offenders. But powerful as the effect of the lectures of Musonius was upon his audience, they do not seem to have contained anything new in regard to science.

The pupil of Musonius was Epictetus of Hierapolis, who lived at Rome (partly under Nero), first as a slave, then as a freedman, and went to Nicopolis in Epirus in 94 A.D., when Domitian expelled all the philosophers from Rome. Here he was attended by Flavius Arrianus, who drew up a sketch of the contents of his lectures. Like his teacher, he sees the object of philosophy simply in education to virtue, in healing moral vices. If in general he presupposes the Stoic system as the basis for this, yet he not only ascribes little value to dialectical investigations, but even in physics there are but few points which he requires to establish his moral rules. Such are the belief in the Deity and his care for men; in the rationality of the universe and its course; in the kinship of the divine and human spirit, which spirit, in spite of his materialism, he, like Seneca, opposes almost in a dualistic manner to the body, though he does not maintain its personal continuance after death. His moral teaching can dispense the more easily with a great systematic apparatus, as he believes with Musonius that the general principles of morality are implanted in us by nature. Only one thing, he says with Musonius, is in our power, our will—the use of our notions. On this alone, according to Epictetus, rests our happiness; everything else he treats as so

indifferent that the distinction between what is to be desired and rejected has scarcely any importance for him. If in this respect he approaches Cynicism, he agrees with it entirely in his views of marriage and civic life, and depicts the true philosopher as a Cynic. On the other hand, he inculcates not merely an unconditional surrender to the course of the world, but also the most comprehensive and unlimited philanthropy; and he establishes this more particularly by reference to the Deity and the equal relation in which all men stand to him. In general his philosophy has a religious character. The philosopher is a servant and messenger of the Deity; and though he takes up a free position towards the national religion, he is rather an earnest preacher of morality full of pious enthusiasm than a systematic philosopher.

The noble Marcus Aurelius Antoninus (born 121 A.D., associated in the government 138, Cæsar 161, died 180), agrees with Epicurus, whose admirer he was, in his general view of Stoicism, in his disinclination to all theoretic inquiries, in his religious view of things, and in absorption in his own self-consciousness. The belief in the divine providence, whose regard for men is shown not only in the whole direction of the world, but also in extraordinary revelations, inclines him to be content with all that the order of nature brings with it and that the gods ordain. Insight into the change of all things, and the decay of the individual, teaches him to desire nothing external as a good and fear nothing as an evil. In his conviction of the divine origin and nature of the human spirit, he finds the

demand that he shall worship the spirit in his own heart only and seek his happiness from him. In the recognition of the sameness of human nature in all men he finds the impulse to the most boundless and unselfish philanthropy. What distinguishes Marcus Aurelius from Epictetus is not only the difference in his view of political activity, which arose from his position, but more especially the fact that the reflex action of ethical dualism on anthropology and metaphysics, which was noticeable in Posidonius and Seneca (pp. 279, 289), is more strongly marked in Aurelius. If he allows the soul to return to the Deity some time after death, yet he is rather a Platonist than an Old-Stoic when he distinguishes the spirit (*νοῦς*) or the *ἡγεμονικόν* as the active and divine principle, not merely from the body, but also from the soul, or Pneuma, and says of God that he beholds the spirits free from their corporeal veils, inasmuch as his reason is in direct contact with their effluences. Here we see Stoic materialism about to pass into Platonic dualism.

§ 85. *The Later Cynics.*

We must regard as a more one-sided form of this Stoic moral philosophy the Cynicism which makes its appearance soon after the beginning of our era. The more that the scientific elements of the Stoic philosophy were thrown into the background as compared with practical requirements, the nearer did it approach to the Cynicism from which it arose. The more melancholy the moral and political conditions which followed

the last century of the Roman Republic, the more necessary did it appear to meet the corruption and distress of the time in the strange but yet effectual manner of the ancient Cynics. Varro in his Menippean Satires had already conjured up their shades in order to tell the truth to his contemporaries in the coarsest language. The letters of Diogenes[1] appear intended to support a real renewal of the Cynic school. But it is in Seneca, who greatly extols Demetrius among the Cynics of his time, that we can first definitely prove it. Among those who came after, the most prominent were: Œnomaus of Gadara, under Hadrian; Demonax, who died, nearly one hundred years old, in Athens about 160 A.D.; Peregrinus, later called Proteus, who publicly burnt himself in 165 in Olympia, and his disciple Theagenes. But this school, though remarkable in the history of culture, has only an indirect importance for the history of science, as the expression of widespread views. Even in the best of its representatives, Cynicism was not free from many excesses, and it often served as a pretext for a vagabond, dirty life, for immoral conduct, and a gratification of vanity by ostentatious display intended to excite attention. Hardly any of these later Cynics struck out new thoughts. Demetrius, and even Peregrinus in spite of his eccentricities, express the moral principles which through the Stoics had long become common property. Demonax, an Eclectic-Socratic in his philosophy, en-

[1] Marcks, *Symb. Crit. ad Epistologr. Græc.* 12 f., places the date of their origin with great probability in the time of Augustus.

joyed general respect owing to his gentle, affectionate, and humane character. Œnomaus, in the fragments of his treatise 'against the jugglers' (γοήτων φωρά), makes a severe attack on the oracles, and in connection therewith defends the freedom of the will against the Stoics. But none of these men are known by any scientific service. It is for the very reason that we have here to deal with a mode of life rather than scientific views that this later Cynicism is so little influenced by the change of philosophical systems. Outliving all the schools except the Neo-Platonists, it continued into the fifth century and could count adherents even in the beginning of the sixth.

§ 86. *The Peripatetic School in the Christian Period.*

The Peripatetic school was inclined towards a general amalgamation with the Neo-Platonic in the direction which had been struck out by Andronicus. We have only fragments of its history in this period. The most memorable among the adherents with whose names we are acquainted are the following: about 50 A.D. Alexander of Ægæ, a teacher of Nero; and about the same time, apparently, Sotion, and perhaps Achaecus also; under Hadrian, Aspasius and Adrastus, one of the most distinguished Peripatetics; about 150–180, Herminus; about 180, Aristocles of Messene and Sosigenes, an excellent mathematician; about 200, Alexander of Aphrodisias. The activity of these men seems to have consisted almost exclusively in the

exposition of the Aristotelian writings and the defence of the Aristotelian doctrine. What is occasionally remarked of them rarely shows any considerable deviation from the views of Aristotle. But that the Peripatetics, even in this later period, did not entirely exclude views which were originally strange to their school, is shown by the example of Aristocles. If this distinguished Peripatetic assumed that the divine spirit (*νοῦς*) inhabited the entire corporeal world, and operated in it, and that it became an individual human spirit wherever it found an organism adapted to receive it, yet he treated the Deity, after the Stoic manner, as the soul of the world, which was also the view taken by the Peripatetics, according to his contemporary Athenagoras ('Supplic.' c. 5). This approximation to the Stoic pantheism was not shared by the disciple of Aristocles, Alexander of Aphrodisias, the famous 'Commentator.' But well as he was acquainted with Aristotle's doctrine and successfully as he defended it, he deviates in important points from too naturalistic a view of its determinations. He not only follows Aristotle in regarding the individual being as something substantial, but he also adds—thereby differing from Aristotle—that the individual was earlier, in itself (*φύσει*), than the universal, and that general concepts exist as such in our minds only, their real object being individual things. Moreover, in mankind he brings the higher part of the soul nearer to the lower, by separating the 'active *νοῦς*' from the human soul, and explaining it by the divine spirit working upon the soul. Thus men only bring a capacity for thought into life (a

potential *νοῦς*), and it is only in the progress of life that this, under the operation described, becomes 'acquired *νοῦς*.' In connection with this theory he absolutely denies, like Aristotle, the immortality of the soul. Finally, he refers providence entirely to nature (*φύσις*) or to the power which spreads from the upper spheres to the lower, and from this mode of activity he excludes any regard for the good of man. After Alexander we do not know of any important teacher of the Peripatetic philosophy as such: the chief seat of Aristotelian studies, even before the end of the third century, is the Neo-Platonic school, and even if individuals like Themistius (§ 101) preferred to be called Peripatetics rather than Platonists, they were in part merely exponents of Aristotle and in part Eclectics.

§ 87. *The Platonists of the First Century* A.D.

The chief support of Eclecticism continued to be the Platonic school. The most remarkable members in the first two centuries of our era are: Ammonius, an Egyptian, who taught in Athens about 60–70 A.D.; his pupil Plutarch of Chæronea, the well-known philosopher and biographer, whose life appears to fall approximately between 48 and 125 A.D.; Gaius, Calvisius Taurus (a pupil of Plutarch), Theo of Smyrna, who taught under Hadrian and Antoninus Pius; Albinus, the pupil of Gaius, who was attended by Galen in Smyrna about 152, and his contemporaries Nigrinus, Maximus of Tyre, and Apuleius of Madaura; Atticus, who, like Numenius, Cronius, the well-known

opponent of Christianity, Celsus, and no doubt Severus also, belongs to the reign of Marcus Aurelius. About the time of this emperor lived also Harpocration, the pupil of Atticus. Part of these Platonists at any rate would not hear of the displacing of the genuine Platonism by foreign elements. This aversion must have been supported by the circumstance that even the Academicians after Plutarch, and no doubt earlier also, followed the pattern of the Peripatetics in devoting special attention to the writings of their founder (cf. p. 14). Thus Taurus not only wrote against the Stoics, but also on the difference of the Platonic and Aristotelian doctrines; and Atticus was a passionate opponent of Aristotle. Yet the first denied the origin of the world in time, and if the second contradicted Aristotle in this as in other respects, yet he approached the Stoics in his assertions about the sufficiency of virtue, and his one-sided practical conception of philosophy. The majority of the Academicians continued to follow the eclectic direction given by Antiochus. But this was accompanied more and more by those Neo-Pythagorean speculations which meet us in Plutarch, Maximus, Apuleius, Numenius, Celsus, and others (§ 92). Besides those mentioned, Albinus is also evidence for the Eclecticism of the school, whose sketch of the Platonic doctrine[1] presents a marvellous mixture of Platonic, Peripatetic, and Stoic theories. Here Albinus followed his teacher Gaius. In the same path we meet

[1] Preserved for us in a revised excerpt under the name of 'Alcinous.' Freudenthal has shown that it belongs to Albinus, *Hellenist. Stud.* 3. H.

Severus also, so far as we know him, and thus the preponderance of this mode of thought in the school cannot be doubted.

§ 88. *Dio, Lucian, and Galen.*

Dio, Lucian, and Galen did not consider themselves members of any special school, but all three wished to pass for philosophers. We shall allow the term most readily to Galen. Dio, surnamed Chrysostom, the Bithynian rhetorician, who was banished from Rome by Domitian and protected by Trajan, put on the cynic garb after his banishment; but his 'philosophy' does not go beyond a popular morality which, though in its contents meritorious, is without scientific character. It adheres chiefly to Stoic doctrines and principles. Lucian of Samosata, a rhetorician like Dio—his fruitful career as a writer coincides approximately with the second half of the second century—is the opponent of all school philosophy, and attacks the Cynics especially with his satire. What he calls philosophy is a collection of moral precepts, to which he is the more inclined to confine himself as he considers theoretic questions to be insoluble. Claudius Galenus of Pergamum (131–201 A.D.), the famous physician, occupied himself far more seriously with philosophy. He devoted numerous treatises to the subject, of which the greater part are lost. An opponent of Epicurus and of Scepticism, and making Aristotle his favourite, though not altogether satisfied with him, he combines with the Peripatetic doctrine much that is Stoic and something that is Platonic. Besides the senses, the trustworthiness of which Galen

undertakes to defend, a second source of knowledge is recognised in the truths which are immediately certain to the intelligence. The adaptation of means to ends in the world is strongly maintained, but Galen ascribes little value to deeper speculative questions, though his expressions are not always consistent. Such speculations are not of much importance for life and action. His Ethics, also so far as we know them, contain only older theories borrowed from various schools.

II. The Later Sceptics.

§ 89. *Ænesidemus and his School.*

Though the Eclecticism of Antiochus succeeded in driving Scepticism from the Academy, its chief abode, the victory was not final. As Eclecticism had arisen out of the fact that the attacks of the Sceptics had destroyed confidence in philosophical systems, this mistrust of all dogmatic convictions continued to be its presupposition, and it was inevitable that it should again take the form of a sceptical theory. Yet this later scepticism was long in attaining the influence and extent which has been enjoyed by the Scepticism of the Academy.

This last school of Greek Sceptics (which called itself an ἀγωγή not a αἵρεσις) wished to be considered a descendant of the Pyrrhonists, not of the Academicians. When the Pyrrhonists became extinct in the third century, the school was revived, as we are told, by Ptolemæus of Cyrene; his pupils were Sarpedon and Heracleides. The pupil of Heracleides was Æne-

sidemus, a native of Cnossus, who taught in Alexandria. But as these new Pyrrhonists laboured in vain to point out any serious difference between their doctrine and that of the New Academy, the influence of the latter on Ænesidemus and his successors is undeniable. What was the relation of Ptolemæus and Sarpedon to the Academy we do not know, or whether they set forth their theory on the same general terms as Ænesidemus. Aristocles (cf. Eus. 'Præp. Ev.' xiv. 18, 22) calls Ænesidemus the reviver of the Pyrrhonian Scepticism. Besides the Academic and Pyrrhonian doctrine the school of the 'empiric' physicians was also doubtless a sharer in it, to which several of the leaders of the new Pyrrhonists belonged. If this school desired to limit itself to the empiric knowledge of the operation of cures, and held the inquiry into the causes of sickness to be aimless, this principle had only to be generalised to end in universal scepticism.

If the list of the sceptical diadochi in Diog. ix. 116 is complete, Ænesidemus can hardly have come forward before the beginning of the Christian era. If, on the other hand, the L. Tubero, to whom, according to Photius, 'Cod.' 212, p. 169, 31, his 'Pyrrhonic speeches' are dedicated, is regarded as the youthful friend of Cicero—who, however, denies the existence of a Pyrrhonic school in his time—we must carry him half a century back.

Ænesidemus agrees in all that is essential with Pyrrho. As we can know nothing of the real nature of things, and equally good grounds can be brought forward against every assumption, we ought not to

maintain anything, not even our own experience. By this means we acquire the true pleasure, the repose of spirit (*ἀταραξία*). So far as we are compelled to act, we must partly follow custom and partly our own feelings and needs. These principles Ænesidemus sought to establish by a detailed criticism of prevailing opinions and views in his *Πυῤῥώνειοι λόγοι*, in which, among other matters, he controverts at length the conclusion of the causes of things. His main grounds of proof are collected on the ten 'Pyrrhonean tropes,' which all unite in the aim of setting forth the relativity of all our presentations of things, but carry out this thought almost exclusively in regard to sensuous perceptions. If Sextus Empiricus and Tertullian, apparently on the same authority, mention that Ænesidemus wished his scepticism merely to serve as a preparation for the Heracleitean physics, this is beyond doubt a mistake, which arose from the fact that the statements of Ænesidemus about Heracleitus were confounded with his own point of view.

Of the eight successors of Ænesidemus in the leadership of the school whose names have come down to us —Zeuxippus, Zeuxis, Antiochus, Menodotus, Theodas, Herodotus, Sextus, Saturninus—Sextus only is further known. On the other hand, we hear that Agrippa reduced the ten tropes of Ænesidemus to five —we do not know when—and these five in turn are reducible to three chief points: the contradiction of opinions; the relativity of perceptions; and the impossibility of a demonstration which does not move in a circle, or proceed from presuppositions which are not proved.

Others went yet further in simplification, and were contented with two tropes: men could not know anything from themselves, as is proved by the contradiction of opinions, nor from others, for they must first get their knowledge from themselves. How much scepticism from this time forth was concerned with an exhaustive contradiction of dogmatism is shown by the writings of Sextus, who as an empiric physician (p. 301), was known as Empiricus, and appears to have been a younger contemporary of Galen, so that he falls in the period about 180–210 A.D.

We possess three treatises by Simplicius, of which the second and third are usually comprehended under the unsuitable title 'Adversus Mathematicos.' These treatises are the Pyrrhonic Hypotyposes, the tractate against the dogmatic philosophers ('Adv. Math.' vii.-xi.) and that against the *μαθήματα*, grammar, rhetoric, mathematics ('Adv. Math.' i.–vi.). There is no doubt that Sextus borrowed by far the greatest part of the materials of his work partly from older members of his school, and partly after their pattern from the Academicians, more especially from Carneades (Clitomachus). The latest name mentioned in his main work ('Math.' vii.–xi.) is that of Ænesidemus. Hence his discussions can be considered as a combination of all that was usually brought forward in his school to defend their point of view. In his discussions on the criterion, truth, demonstration, and the marks of proof, &c., he controverts, often with wearisome discursiveness and, for reasons of different value, the formal possibility of knowledge. He attacks the concept of the cause in

every possible application; but it is just the question of the origin of this concept which, like his predecessors, he leaves out of sight. He repeats Carneades' criticism of the Stoic theology, applying it to meet the notions of the operative cause. He also finds the material cause, or bodies, inconceivable in every respect. He criticises the ethical assumptions, repeating that of the good and happiness in order to show that knowledge is unattainable on this ground. Finally, from these and other considerations he draws the conclusions which had long been acknowledged, that owing to the balance of the pros and cons (the *ἰσοσθένεια τῶν λόγων*), we must forego all decision and renounce all knowledge, and by this means only can we attain to repose and happiness, which it is the aim of all philosophy to acquire. This, however, is not to prevent us from allowing ourselves to be led in our actions, not only by perceptions, our natural impulses, law, and custom, but also by experience. Experience instructs us in the ordinary course of things, and puts us in a position to form certain regulations for life.

The scepticism of Ænesidemus spread but little beyond the limits of his school, the last successor in which (Saturninus) must have belonged to the first quarter of the third century. The only other sharer in his opinions that we can prove is the rhetorician and historian Favorinus of Arelate, whose life may be placed approximately in 80–150 A.D. But as an indication of scientific feeling, this mode of thought has a more general importance, and we cannot fail to recognise how much it aided from the

beginning in developing the eclecticism of the time into Neo-Pythagorean and Neo-Platonic speculation.

III. The Precursors of Neo-Platonism.

§ 90. *Introduction.*

In a period in which much greater weight was laid on the practical effect of philosophy than on scientific knowledge as such—in which a deep mistrust of man's capacity of knowledge widely prevailed, and there was a general inclination to accept truth, when found, on the basis of practical necessity, and a direct conviction of it, even at the cost of scientific consistency—in such a period only a slight impulse was needed in order to lead the spirit in its search for truth beyond the limits of natural knowledge to a supposed higher fountain. This impulse Greek thought appears to have received through that contact with Oriental views, of which Alexandria was the centre. The main part on the Oriental side was played by Judaism, the ethical monotheism of which offered far more points of contact to Hellenic philosophy than the mythology of the national religions. According to all appearance it was at Alexandria that the speculation first came forward, which, after centuries of slow development, finally ended in Neo-Platonism. The last motive in this speculation was the yearning after a higher revelation of the truth; its metaphysical presupposition was an opposition of God and the world, of spirit and matter, as intermediaries between which men took refuge in demons and divine

power. Its practical consequence was a combination of ethics with religion, which led partly to asceticism and partly to the demand for a direct intuition of the Deity. It has already been observed (p. 32) that its development took place partly on Greek and partly on Judaic-Hellenistic soil.

I. THE PURELY GREEK SCHOOLS.

§ 91. *The Neo-Pythagoreans.*

Though the Pythagorean philosophy as such became extinct in the course of the fourth century, or amalgamated with the Platonic, Pythagoreanism still continued as a form of religious life, and that the Pythagorean mysteries spread widely is proved by other evidence, and more especially by the fragments of the poets of the middle comedy. It was about the beginning of the first century B.C., and apparently at Alexandria, that the attempt was made to give a new life to the Pythagorean science, now extended and enriched by later doctrines. The earliest demonstrable evidence for these efforts is to be found in the interpolated Pythagorean treatises: the semi-Stoic exposition of the Pythagorean doctrines, of which Alexander Polyhistor (about 70 B.C.) gives us an account in Diog. viii. 24 f.; the treatise of the so-called Lucanus Ocellus on the universe, which was known to Varro, and the preambles to the laws of Zaleucus and Charondas quoted by Cicero ('Legg.' ii. 6, 14). In the later period a mass of such supposed old Pythagorean, but really Neo-Pythagorean treatises, is mentioned (about ninety, by

more than fifty authors), and many fragments of them have come down to us, among which those of Archytas are pre-eminent in number and importance. The first adherent of the Neo-Pythagorean school whose name we know is the friend of Cicero, the learned P. Nigidius Figulus (died 45 B.C.), who was joined by P. Vatinius. The school of the Sextii (p. 286) also stood in connection with the new Pythagoreans; definite traces of their existence and their doctrines are found up to the time of Augustus in Arius Didymus and Eudorus and in King Juba II.'s predilection for Pythagorean writings. In the second half of the first century A.D. we find Moderatus of Gades and Apollonius of Tyana. Both were writers in their cause, and Apollonius traversed the Roman world in the part, or at any rate with the reputation, of a wizard. Under Hadrian Nicomachus of Gerasa composed the work of which we possess parts; Numenius (§ 92) appears to have lived under the Antonines, and Philostratus belonged to the first third of the third century (p. 310).

In the doctrines by which these new Pythagoreans sought to establish the moral and religious principles of their sect, we find connected with the old Pythagorean views and the Platonic intuitions, which were still more important in this school, something borrowed from the Peripatetics and Stoics. This philosophy thus bears an eclectic character, like that of the contemporary Academicians, and within the common tendency we find many deviations in details. Unity and quality (δυὰς ἀόριστος) are declared to be the final bases. The first is regarded as the form, the second as the matter.

But while a part of the Pythagoreans explained unity to be the operative cause, or the Deity, others distinguished the two, and the Deity was partly described as the moving cause which brought form and matter together, as in the Platonic Timæus, and partly as the One, which then produced derived unity and duality. The latter is a form of doctrine which unites the Stoic monism with the Platonic-Aristotelian dualism, and thus prepares the way for Neo-Platonism. The same contrast is repeated in the assertions about the relation of God and the world. One section regard the Deity as higher than the reason, and place it so far above all that is finite, that it cannot enter into direct contact with anything that is corporeal; others describe God as the soul which permeates the whole body of the world, and follow the Stoics in describing this soul as warmth, or pneuma. The formal principle was thought to comprehend all numbers, with which the ideas are now considered exactly identical. But the importance of the separate numbers was a matter of much fanciful speculation in the school in which the ordinary mathematics were eagerly studied. Yet even here the new Pythagoreans deviated from the old as well as from Plato. They regarded the ideas or numbers as thoughts of the Deity. Hence they wished them to be regarded not as the substance of things, but only as the original forms, after which they were fashioned. The Platonic descriptions of matter were taken literally; the world-soul was placed between matter and the ideas as Plato had placed it, and the so-called Locrian Timæus adopted the Platonic construction of the soul.

Besides metaphysics every other part of philosophy was treated in the Neo-Pythagorean writings. A proof of the *logical* activity of the school can be found, among other works, in the pseudo-Archytean treatise 'On the Universe,' which treats the doctrine of the Categories mainly after the Aristotelian pattern, but with many deviations. In their *physics* the Neo-Pythagoreans primarily follow Plato and the Stoics. They extol the beauty and perfection of the world, which are not injured by the evil in it, and above all, they regard the stars as visible deities. From Aristotle they borrowed the doctrine of the eternity of the world and the human race, a tenet which was universally maintained in the school from the time of Ocellus; they also chiefly follow Aristotle in their assertions about the contrast of the heavenly and earthly worlds, the unchangeableness of the one, and the changeability of the other. With Plato and the old Pythagoreans magnitudes of space are derived from the numbers, and the elements from the regular bodies; but, on the other hand, we also meet, in Ocellus, with the Aristotelian doctrine of the elements. The anthropology of the school is that of Plato; in this matter the Pythagorean Alexander (p. 306) alone places himself on the side of Stoic materialism. The soul is regarded with Xenocrates as a number moving itself, and other mathematical symbols are used for it: the Platonic doctrine of the parts of the soul, its pre-existence and immortality, is repeated; but so far as we know, the migration of the soul is, strangely enough, thrown into the background among the Neo-Pythagoreans, while the belief in demons plays an

important part among them. Nicomachus even brings the demons into connection with the angels of the Jews.

The existing fragments of the numerous *ethical* and *political* writings of the school present only colourless repetitions of Platonic and still more of Peripatetic determinations, with proportionately few additions from the Stoics. The peculiarity of the Neo-Pythagorean school is more definitely marked in their religious doctrines. On the one hand, we find a more refined idea of God, and in reference to the highest god the demand for a purely spiritual worship; on the other, the national worship is presupposed, a higher value is ascribed to prophecy, and a purity of life required, to which belong the abstinences common in the Pythagorean mysteries. This element is developed more strongly in their descriptions, which set forth the ideal of Neo-Pythagorean philosophy in Pythagoras and Apollonius of Tyana, and which we find in the notices of the biographies of Pythagoras written by Apollonius, Moderatus, and Nicomachus, and in the 'Life of Apollonius' by Philostratus (written about 220 A.D.). Here philosophy appears as the true religion, the philosopher as a prophet and servant of God. The highest mission of mankind, the only means for liberating the soul from the entanglements of the body and sensuality, is purity of life and true worship of the gods. If this view is accompanied by noble ideas of the Deity and a virtuous life devoted to the good of mankind, yet, on the other hand, asceticism is an essential part of it. In its full extent this asceticism comprises abstinence from flesh and wine, and from

marriage; the linen dress of the priests; the forbidding of all oaths, and animal offerings; and within the societies of ascetics and philosophers, community of goods and all the other arrangements ascribed by the ancient legend to the old Pythagoreans. The most obvious reward of this piety consists in the power of working miracles, and in the prophetic knowledge bordering on omniscience, proofs of which abound in the biographies of Pythagoras and Apollonius.

§ 92. *The Pythagorising Platonists.*

The tendency of thought, which was first announced in the appearance of the new Pythagoreans, afterwards found an echo among the Platonists, from whom the Pythagoreans had originally borrowed the most important part of their doctrines. Eudorus (p. 282) is seen to be influenced by them; they occur more definitely in Plutarch (p. 297), who was the most influential representative in the first century A.D. A Platonist, who is nevertheless open to the influence of the Peripatetic, and in some details even of the Stoic, philosophy, in spite of all his polemics against their principles, and to whom the Epicurean school only is absolutely abhorrent, Plutarch accepts Plato's teaching almost entirely in the sense of the Neo-Pythagoreans who preceded him. He ascribes but little value to theoretic questions as such, and even doubts the possibility of their solution. The more lively, on the contrary, is his interest in everything which is of importance for the moral and religious life. He opposed the Stoic materialism and the Epicurean 'atheism' (*ἀθεότης*) no less than the

national superstition with a pure view of the Deity corresponding to Plato's. But in order to explain the nature of the world of phenomena he finds a second principle indispensable. This he does not seek in matter, which is without properties, but in the evil world-soul, which, being connected with matter from the beginning, and first filled with reason and order at the formation of the world, was changed into the divine soul of the world, yet continues to exercise an influence as the final source of all evil. Deviating from the majority of the Neo-Pythagoreans, he conceives the creation of the world as an act in time. The divine operation in the world he regards less under the form of the Platonic doctrine of ideas and the Pythagorean speculation on numbers than under the ordinary belief in providence. Controverting Epicurus, and the fatalism of the Stoics, he attributes the highest value to this belief. But the higher that he has elevated the Deity above all that is finite the more important are the demons as the intermediaries in its operation on the world. To these he transfers everything which he does not venture to ascribe directly to the Deity, and he has much that is superstitious to say about them. That he not only assumes five elements, but also a quintette of worlds, is a trait peculiar to him. What Plato stated in mythical language about a change of the condition of the world is accepted by him in so dogmatic a manner that he here approaches the Stoic teaching which he elsewhere controverts. Certain Aristotelian theories were mingled with the Platonic anthropology; freedom of the will and immortality, including the migration of souls, are

distinctly maintained. The Platonic and Peripatetic ethics were defended by Plutarch against the different theories of the Stoics and Epicureans, and applied to the various relations of life in a pure, noble, and moderate way. In this it is natural that we should find an influence of Stoic cosmopolitanism, and a limitation of political interests, owing to the nature of the times. The most characteristic mark of the Plutarchian ethics is their close connection with religion. Pure as Plutarch's idea of God is, lively as are his descriptions of the perverseness and corruptions of superstition, yet in the warmth of his religious feelings and the small confidence which he reposes in man's power of knowledge, he cannot abandon the belief that the Deity comes to our assistance by direct revelations. These we receive the more clearly in proportion as we are freed by enthusiasm from any activity on our own part. At the same time he takes into consideration the natural conditions and helps for these revelations, and thus his theory makes it possible for him to justify the belief of his people in prophecy in the manner which had long been usual among the Stoics and Neo-Pythagoreans. His general attitude to the national religion is the same. The gods of the different nations are, as he says, only different names to denote one and the same divine nature, and the powers which serve it. The contents of the myths form philosophical truths, which Plutarch could enucleate from them with all the traditional caprice of allegorical exposition. Shocking and disgusting as many religious usages might be, yet his doctrine of demons, if no other means sufficed, enabled him to

find superficial justification for them. Yet he did not require the Pythagorean asceticism.

Along with Plutarch we find among the later Platonists (p. 297) two rhetoricians of kindred spirit, Maximus and Apuleius, in whose eclectic Platonism, beside the opposition of God and matter, the demons play a great part as intermediaries in the contrast. Theo of Smyrna shared in the Neo-Pythagorean doctrine of the original bases and of numbers. The eternity of the world, the assumption that the ideas are the thoughts of the Deity, the demons, to whose protection the world beneath the moon is confided, meet us in Albinus; the evil world-soul of Plutarch in Atticus. Celsus, like his predecessors, sees in demons the intermediaries of the divine operation on the world, which cannot be direct owing to the sublimity of God, and the opposition in which he stands to matter. He makes use of this assumption in order to defend polytheism and the national worship. Numenius of Apamea (about 160 A.D.) is still nearer to the Neo-Pythagoreans, and is generally considered to be one. Yet the foundation of his views is formed by Platonism, besides which, with wide-extending syncretism, he appeals to Magians, Egyptians, and Brahmins, and even to Moses, whom he holds in high repute (Plato is a Μωσῆς ἀττικίζων). He also appears to have used Philo of Alexandria and the Christian Gnostics. Beginning with the distinction of God and matter, of unity and indefinite duality (p. 307), he makes the gulf between the two so great that he considers a direct operation of the highest deity on matter as impossible, and hence (like the

Gnostic Valentinus), he inserts between them the creator of the world, or Demiurge, as a second deity. The world itself he called a third deity. Like Plutarch he supposed that an evil soul was united with matter. From this arose the mortal part of the human soul, which he named a second, irrational soul. Degraded from an incorporeal life, by its guilt, into the body, the soul, when it again departs, becomes indissolubly united with the Deity, if it is in need of no migration through other bodies. Insight is a gift of the gods, and for men the highest good. This gift is only allotted to him who applies himself to the primal good, to the exclusion of all other thoughts. Cronius and Harpocration, so far as we know, tended in the same direction as Numenius.

An Egyptian branch of the Neo-Pythagorean and Platonic school is the source from which, apparently towards the end of the third century, the majority of the writings arose which have come down to us under the name of Hermes Trismegistus. Here also we find the expression of that which is the leading trait of the school—the effort to fill up the chasm between the world and the Deity by intermediate creatures. The highest deity is raised above both as the author of being and reason. He is the good, which is also thought of as a willing and thinking being, as a personality. The *νοῦς* is related to him as the light to the sun, being at the same time different and inseparable from him. On the *νοῦς* depends the soul (more doubtfully *φύσις*), between which and matter stands the air. When matter was arranged and animated by the Deity, the world was

created. Supported by the divine power, filled with visible and invisible gods and demons, the world is regarded as the second god, and man as the third. The unalterable course of the world, providence, and destiny were taught in the Stoic fashion ; the Platonic anthropology is repeated with many additions, which do not altogether agree with it. The only means to secure for the soul its future return to its higher home, is piety, which here coincides with philosophy, and consists essentially in the knowledge of God, and in uprightness. It is obvious that this depends upon the renunciation of the sensuous world; yet the ascetic consequences of this point of view are seen in isolated instances only in the Hermetic writings. The more strongly do we recognise as their leading motive the tendency to defend the national and especially the Egyptian religious worship against Christianity, the victory of which is already regarded as almost unavoidable.

II. JEWISH GREEK PHILOSOPHY.

§ 93. *The Period before Philo.*

The dualistic speculation of the Neo-Pythagoreans and Platonists developed among the Jews, who were subject to Greek influences, even more vigorously than on purely Greek soil. The Jewish national religion presented many important points of contact to this speculation, in monotheism, in the opposition of God and the world, in the belief in revelation and prophecy, in the notions about the angels, the spirit of God, and divine wisdom. Even in Palestine, when the country was first

under Egyptian and then under Syrian rule, the Greek mode of life and thought became so widely spread that Antiochus Epiphanes, in his attempt to Hellenise the Jews by force (167 B.C.), could count on a numerous party, especially among the higher classes. Even before this date these views seem to have found acceptance (according to Ecclesiast. ix. 2, vii. 28). We find them further developed among the Essenes. These were a society of Ascetics which arose, apparently in the decades following the rebellion of the Maccabees, from the bosom of the law-abiding but retiring Chasidæans, a sect who withdrew from public life. They exhibit so important a relationship to the Neo-Pythagoreans, that we can only assume that they arose under the influence of the Orphic Pythagorean asceticism, and subsequently, after the formation of a Neo-Pythagorean philosophy, they adopted many of its doctrines. In the first century of our era, in Philo, Josephus, and Pliny, the Essenes appear as a society of about 4,000 members, who lived together with complete community of goods, partly in their own settlements, partly in houses belonging to their order in the towns. They were subject to strict discipline and hierarchical control, with priests and officers of their own and absolute community of goods. They practised the most extreme simplicity; their principles were strictness of morals, truth, and unbounded gentleness; they did not tolerate slavery. With this they combined a purity of life which was expressed in peculiar customs. They abstained from wine and flesh, and from the use of ointments; they disapproved of the killing of animals and bloody offerings.

They refused all food which was not prepared according to the rules of the order; they required celibacy from their members, and even from those of a lower order they demanded that they should indulge in marital intercourse solely with a view to the procreation of children. They had a most punctilious dread of any Levitic defilement; they wore only white garments; they forbade oaths; they replaced the national worship, from which they were excluded, by their daily baths and common meals. They had their own doctrines and rules, which were kept strictly secret; while they adapted the Scriptures of their nation to their own point of view by allegorical interpretation. They believed in a pre-existence of the soul, and an incorporeal life after death; with which they appear to have combined the thought that the opposition of better and worse, of male and female, &c., ran through the whole world. They ascribed a special importance to the belief in angels (as others did to the belief in demons). In the sunlight and the elements they worshipped manifestations of the Deity; they considered the gift of prophecy to be the highest reward of piety and asceticism, and many of them claimed to possess it.

But in Alexandria, the great centre where Hellenic and Oriental civilisation met and crossed, Greek philosophy found a far more favourable soil. How early and how universally the numerous and opulent Jewish population in this city acquired the Greek language, and the Greek views which of necessity went with it, is shown by the fact that after a few generations the Egyptian Jews required a Greek translation of their

Scriptures, because they no longer understood them in the original language. The first certain proof of the occupation of the Alexandrian Jews with Greek philosophy is seen in the fragments of a treatise of Aristobulus (about 150 B.C. We have received them through Eusebius, 'Pr. Evang.' vii. 14, viii. 10, xiii. 12. They were without reason suspected by Lobeck and Hody, but were defended by Valckenaer). This Jewish Peripatetic assured King Ptolemy Philometor that the oldest Greek poets and philosophers, and especially Pythagoras and Plato, had used our Old Testament, and in order to procure evidence for this assertion, he appeals to a series of verses supposed to be the work of Orpheus and Linus, Homer and Hesiod, which are, however, shameless forgeries, though neither Clemens nor Eusebius detected them. On the other hand, he attempts by interpretation to remove the anthropomorphisms, which shock his advanced thought, from the maxims and narratives of the Old Testament. What he asserts of his own views, so far as it is of philosophical origin, does not contain any reference to that form of speculation which we find at a later time in Philo. Of this we find definite traces for the first time in the first century B.C. in the pseudo-Solomonian 'Book of Wisdom,' which, along with some elements which agree with Essenism—such as the assertions on the pre-existence of the soul, its oppression by the body, and its imperishability (viii. 19 f.; ix. 14 ff. &c.), and the assumption of a premundane matter (xi. 17 f.)—reminds us of the Platonists and Pythagoreans. By its substantiation of the divine wisdom (vii. 22 ff.) it prepared the way for

Philo's doctrine of the Logos. To the same period belong those predecessors of Philo, whom he frequently mentions when he appeals to the rules of allegorical explanation which they had laid down, and quotes some of these explanations, in which the 'Divine Logos' occurs along with some Stoic determinations. But we do not know whether and how this Logos was distinctly divided from the Deity before the time of Philo.

§ 94. *Philo of Alexandria.*

Philo's life falls between 30 B.C. and 50 A.D. He was himself a true son of his nation and filled with the highest veneration for its Scriptures, and above all for Moses. These Scriptures he considered to be verbally inspired, not only in the original text, but also in the Greek translation. But at the same time he is the pupil and admirer of the Greek philosophers, Plato and Pythagoras, Parmenides, Empedocles, Zeno, and Cleanthes. Thus he is convinced that in both there is but one and the same truth, which, however, is found in purity and perfection only in the Jewish revelations. This conviction he justifies by the ordinary means. On the one hand, he presupposes that the Hellenic sages used the Old Testament writings; on the other, he applies the allegorical explanation of Scripture without limits, and can thus discover any meaning that he chooses in any passage whatever. Hence, although he desires to be merely an expositor of Scripture, and puts forward his views almost entirely in this form, his system is yet, in truth, a combination of Greek philosophy and Jewish theology, and the scien-

tific parts come to a preponderant extent from the first. But the philosophy which he follows belongs almost entirely to that form of Platonism which was developed in the previous century, primarily at Alexandria, and was named sometimes after Plato, and sometimes after Pythagoras, though Stoicism, especially in Philo, contributed largely to it.

The idea of the Deity forms the starting-point of the system of Philo. But this is just the point where the various tendencies, from which his speculation has arisen, cross each other. On the one hand, he has such a high conception of the elevation of God above all that is finite, that in his view no idea and no name can correspond to the Divine majesty. God seems to him more perfect than any perfection, better than the good, without name and property, and inconceivable. As Philo says, we can only know that he is; we cannot know what he is; only the name of the Existent (the name of Jehovah) can be applied to him. On the other hand, God must include in himself all being and all perfection; for it is from him alone that perfection can come to the finite, and it is only to avoid approaching too nearly to his perfection that no finite predicate is to be given to him. Above all, he must be thought of as the final cause of all; a ceaseless operation must be ascribed to him, and all perfection in created things derived from him. It is self-evident that for the Platonists and the Jewish monotheists this activity can only be used for the best ends; for of the two essential properties of God, power

and goodness, the second expresses his nature even more directly than the first.

In order to unite this absolute activity of God in the world with his absolute superiority to the world, Philo has recourse to an assumption which was not unknown to others in that period (cf. pp. 283, 312, 315), but which no one before Plotinus worked out so systematically as Philo. He assumed the existence of intermediate beings. As a pattern in defining these more precisely he availed himself not only of the belief in angels and demons, the statements of Plato about the world-soul and the ideas, but above all, of the Stoic doctrine of the effluences of the Deity which permeate the world. These intermediate beings he calls powers (*δυνάμεις*), and describes them, on the one hand, as properties of the Deity, as ideas or thoughts of God, as parts of the universal power and reason prevailing in the world; and on the other, as the servants, ambassadors, and pursuivants of God, as the performers of his will, as souls, angels, and demons. To harmonise these two modes of exposition, and give a clear answer to the question of the personality of these powers, was impossible for him. All these powers are comprehended in one, in the Logos. The Logos is the most universal intermediary between God and the world, the wisdom and reason of God, the idea which comprises all ideas, the power which comprises all powers, the viceroy and ambassador of God, the organ of the creation and government of the world, the highest of the angels, the first-born son of God, the second God (*δεύτερος θεός, θεός,* in opposition to *ὁ θεός*). The

Logos is the pattern of the world and the power which creates everything in it, the soul which clothes itself with the body of the world as with a garment. In a word, it has all the properties which belong to the Stoic Logos (p. 240), when we think of this as divided from the Deity and set free from the traits which are the result of the Stoic materialism. But its personality is just as uncertain as that of the 'powers' generally; and this is inevitable, for only so long as the conception of the Logos comes between that of a personal being distinct from God and that of an impersonal divine power or property, is it adapted to solve, at least superficially, the unsoluble problem, for which it is required—to make it conceivable that God can be present with his power and operation in the world and all its parts, while in his nature he is utterly beyond it and is defiled by any contact with matter.

The nature of the world can only be partly understood from the divine power operating in it. In order to explain the evils and defects of finite existence, and, above all, the evil which clings to the soul owing to its connection with the body, we must presuppose a second principle, and this Philo finds, like Plato, only in matter. He also follows Plato in his more precise definitions of matter, except that he regards it like most authorities as a mass occupying space, and thus sometimes names it the *μὴ ὄν* with Plato, and sometimes *οὐσία* with the Stoics. By the mediation of the Logos God formed the world out of the chaotic mixture of matter. Hence the world had a beginning though it has no end. Like the Stoics, Philo con-

sidered the world as entirely supported by the operative power of God, which is seen in its most glorious form in the stars, which are visible gods. Its perfection he defends in the sense of the Stoic theodicy, but he does not omit to give expression to the thought that all is arranged according to numbers, by frequent application of the numerical symbolism of the Pythagoreans. In his anthropology, the part of physics to which he ascribes most importance, he adhered to the Platonic and Pythagorean tradition of the fall of souls, the incorporeal life of the purified souls after death, the migration of those who need purification, the kinship of the human spirit with the divine, the parts of the soul, and the freedom of the will. But the most important part with him is the sharp contrast between reason and sensuality. The body is the grave of the soul, the source of all the evils under which it sighs. By the combination of the soul with the body there is inborn in everyone the inclination to sin, from which no one is ever free from his birth till his death. Thus to be freed as far as possible from sensuality is the first requisite of the Philonian ethics; he demands with the Stoics an apathy, an entire extirpation of all passions; like them, he regards virtue only as a good, rejects all sensual pleasure; he professes Cynical simplicity, adopts their doctrine of virtue and the passions, their description of the wise man, the distinction of the wise and the proficient, and with them acknowledges himself a citizen of the world. But trust in God takes the place of Stoic self-confidence. God alone works all good in us. He alone can plant

virtue in us; only the man who does good for its own sake is truly good; wisdom, on which rests all virtue, arises only out of faith. But even in this virtue Philo deals far less with action than with knowledge, or more correctly, with the inner life of the pious spirit; for not only does the active (political) life thwart it, inasmuch as it entangles us in external things and withdraws us from ourselves, but even science has only a value for him as a means to piety. But even religious perfection has also various stages. In its origin the (ascetic) virtue which rests on practice is lower than that which is founded on instruction, and both are lower than the virtue which arises directly out of a divinely-favoured nature. Virtue finds its last and highest aim in the Deity only, to which we approximate more and more as we come more immediately into contact with it. Indispensable, therefore, as science may be, we only attain the highest when we pass beyond all intermediate stages—even the Logos—and in a condition of unconsciousness, or even of ecstasy, receive the higher illumination into ourselves. Thus we see the godhead in its pure unity and allow it to operate upon us. This attempt to go beyond conscious thought had as yet been unknown in Greek philosophy. Even after Philo, two centuries elapsed before it was an accepted dogma.

THIRD SECTION.

NEO-PLATONISM.

§ 95. *Origin, Character, and Development of Neo-Platonism.*

THE views which for centuries had become more and more exclusively prevalent in the Platonic and Pythagorean schools were developed into a great system in the third century of our era. In the construction of this system not only the Platonic and the Aristotelian philosophy, but even the Stoic, was used to a great extent. Both internal and external reasons allow us to suppose that Philo's doctrine also had, directly or indirectly, an effect on its origin. If the predecessors of Neo-Platonism had found the importance of philosophy in the fact that it brought us into connection with the Deity, and conducted us to that infinite essence, elevated above all being and conception, the attempt was now made to derive the totality of finite things, including matter, from an original essence which was entirely unknown and indefinite. In this way preparation was made for a gradual elevation to this essence, which finally ended in substantial union. The practical aim and the final motive of this speculation is the same which the Platonists and Pythagoreans had previously kept before them. Like them, it proceeds from the opposition of the finite and infinite, the spirit and matter. But not only is this contrast stretched to the most extreme point,

and the unity with God, to which man ought to attain, forced to the very utmost, but it is also required that the contrast shall be methodically derived out of unity and the totality of things conceived as a single whole proceeding in regular succession from the Deity, and returning into it. The dualistic spiritualism of the Platonic school is here combined with the monism of the Stoics to produce a new result, though the authors of this speculation desired to be nothing else but true disciples and expounders of Plato.

Ammonius Saccas is called the founder of the Neo-Platonic school. He was at first a day-labourer, but afterwards became distinguished as a teacher of the Platonic philosophy at Alexandria. He appears to have died about 242 A.D., but he left no writings behind him. Yet it is only untrustworthy accounts from the fifth century (Hierocles, and Nemesius apparently following Hierocles) who ascribe to him the distinctive doctrines of the Plotinic system. We are entirely without any original accounts of his doctrine. Among his pupils, Origen (who is not to be confounded with the Christian theologian of the same name, who is also said to have attended Ammonius) did not distinguish the Deity from the *νοῦς*, above which it was placed by Plotinus, and even controverted its distinction from the creator of the world (p. 315). A second disciple, Cassius Longinus, the well-known critic, philologist, and philosopher (whom Aurelian executed 273 A.D.), was equally at variance with Plotinus' conception of the Platonic doctrine, and defended against him the proposition that the ideas exist separately, apart from the (divine) *νοῦς*. This proves

that the doctrine of Ammonius was essentially distinct from that of Plotinus, though it might approach more nearly to it than that of the earlier Platonists. The real founder of the Neo-Platonic school was Plotinus. This eminent thinker was born in 204–5 A.D. at Lycopolis in Egypt. For eleven years he enjoyed the teaching of Ammonius. In 244–5 he went to Rome, and there founded a school, over which he presided till his death. He was universally revered for his character and held in high respect by the Emperor Gallienus and his consort Salonina. He died in Campania in 270 A.D. His writings were published after his death by Porphyrius in six enneads.[1] After Plotinus, Iamblichus and the school of Athens mark the most important point in the history of Neo-Platonism. By Iamblichus it was entirely absorbed into the service of positive religion; by the Athenian school, with the aid of the Aristotelian philosophy, it was transformed into a formal scholasticism, carried out with masterly logical skill.

§. 96. *The System of Plotinus. The Supersensuous World.*

The system of Plotinus, like that of Philo, proceeds from the idea of God, and comes to a conclusion in the demand for union with God. Between these poles lies all which was taught on the one hand about the origin

[1] Editions by Marsilius Ficinus (1492, often reprinted, finally at Basel, 1580, 1615); Creuzer (Oxford, 1855); A. Kirchhoff (1856); H. F. Müller (1878). On the system of Plotinus, Kirchner, *Phil d. Plot.* 1854; A. Richter, *Neuplat. Studien*, 5 Hefte, 1864 ff.

of derived being out of the Deity, and on the other, about its return to the Deity.

In his conception of the idea of God Plotinus carries to the extreme point the thought of the infinity of God, and his elevation above the world. Presupposing that the original must be outside the derived, that which is thought outside the thinker, the one outside the many, he sees himself compelled to carry the final source of all that is real and knowable entirely beyond all being and knowledge. The original essence (τὸ πρῶτον) is without limit, form, or definition, the unlimited or infinite (ἄπειρον); no corporeal and even no intellectual property can be ascribed to it —neither thought, nor volition, nor activity. All thought contains the distinction of the thinker from thinking and from what is thought, all volition the distinction of being and activity, which implies plurality; all activity is directed to something beyond; but the first element must be a self-included unity. Moreover, in order to think, or will, or be active, there is need of something to which the activity is directed; but God has need of nothing beyond himself. He does not even need himself and cannot be divided from himself. Hence we cannot ascribe to him any self-consciousness. Here, therefore, for the first time, the denial of the personality of God, for which Carneades had prepared the way (p. 272), comes forward as a decisive principle. No definite property can be ascribed to the Deity; for the Deity is that which is above all being and all thought. The conceptions of unity and goodness are best suited for a positive description of it; yet even they are

inadequate; for the first merely expresses the denial of plurality, and the second implies an operation on something external. The divinity is, therefore, only the basis to which we must reduce all being and all operation; but of its nature we know nothing, except that it is entirely separate from all that is finite and known to us.

In so far as the Deity is the original force, it must create everything. But as it is raised above everything in its nature and needs nothing external, it cannot communicate itself substantially to another, nor make the creation of another its object. Creation cannot, as with the Stoics, be regarded as the communication of the divine nature, as a partial transference of it into the derivative creature; nor can it be conceived as an act of will. But Plotinus cannot succeed in uniting these determinations in a clear and consistent conception. He has recourse, therefore, to metaphors. The First principle, he says, by virtue of its perfection flows, as it were, over, &c.; sends forth a beam from itself, &c. The rise of what is derivative from the original being is said to be a necessity of nature. Yet it is in no way needful for that being, and is not connected with any change in it. Hence the derivative is connected with that from which it has arisen, and strives towards it; it has no being which is not created in it by its source; it is filled and supported by, and exists only by virtue of, its creation from it. But the creative element remains undivided, and external to what is created; so that Plotinus' system has less right to be called a system of emanation than a system of dynamic pantheism. As the earlier in its essence remains

external to the later, the latter is, of necessity, more imperfect than the former: it is a mere shadow or reflection of it. And as this relation is repeated with every new reproduction, and everything participates in what is higher through its immediate cause, the totality of the beings which arise from the original essence forms a series of decreasing perfections, and this decrease goes on till at length being passes into not-being, light into darkness.

The first product of the original essence is *νοῦς*, or thought, which is at the same time the highest being. The predecessors of Plotinus had already placed the truly existent, the ideas, in the divine thought; while Plato, on his part, had ascribed reason and thought to the Existent. Plotinus arrived at the 'First,' in passing beyond all being and thought; but in the descent from the first, these occupy the nearest place. The thought of the *νοῦς* is not discursive, but without time, complete at every moment, and intuitive. Its object is formed partly by the First (of which, however, even this most complete thought can form no adequate and thoroughly uniform picture), and partly, as in the Aristotelian *νοῦς*, by itself, as being what is thought and existent. On the other hand, it does not apply itself to what is beneath it. So far as *νοῦς* is the highest being, the five categories of the intelligible apply to it. These categories, which Plotinus borrowed from the 'Sophist' of Plato, are: being, movement, fixity (*στάσις*), identity, and difference. But the later Neo-Platonists, after Porphyry, drop these categories of the intelligible, and content themselves with

the ten Aristotelian categories, against which, as well as the four categories of the Stoics, Plotinus had raised many objections, and which he allowed to hold good for the world of phenomena only. The universal element, which is defined more precisely by the categories, is called by Plotinus the unlimited or the intelligible material. In it lies the basis of plurality, which the *νοῦς* has in itself in contradistinction to the First, and by virtue of which it separates into the supersensuous numbers or ideas. Of these ideas one must correspond not only to each class, but to each separate being as the pattern of its individual peculiarity. But at the same time, these ideas are conceived after Philo, in a form of exposition yet more common in Plotinus, as operative powers or spirits (*νοῖ, νοεραὶ δυνάμεις*). And as they are not external to each other, but in each other, without, however, intermingling, they are united again in the unity of the intelligible world (*κόσμος νοητός*) or Platonic *αὐτοζῷον*. This as the realm of the ideas is also the realm of the beautiful, the primal beauty, in the imitation of which all other beauty consists.

It follows from the perfection of the *νοῦς* that it must produce something from itself. This product is the soul. The soul also belongs to the divine supersensuous world; it contains the ideas, and is itself number and idea; as the phenomenon of the *νοῦς*, it is life and activity, and, like the *νοῦς*, it leads an eternal life without time. But it already stands on the border of that world. In itself indivisible and incorporeal, it yet inclines to the divisible and corporeal, over which it watches according

to its nature and is intermediary in the operations proceeding from *νοῦς*. In itself, therefore, it is not so homogeneous as the *νοῦς*. The first soul, or the world-soul, is not only in its nature outside the corporeal world: it does not even work directly upon it. If Plotinus ascribes self-consciousness to it, yet he finds perception, remembrance, and reflection unworthy of it. The first soul sends forth a second from it, like a beam. This Plotinus calls nature. It is the soul which is united with the body of the world, as our soul is united with our body. But each of these souls produces and comprises a number of separate souls, which are united in it as in their origin, and extend from it to the various parts of the world. In these part-souls the lower limits of the supersensuous world are reached; when the divine power descends lower, the result is matter, which is its most imperfect manifestation.

§ 97. *Plotinus' Doctrine of the Phenomenal World.*

In his view of the world of phenomena and its bases, Plotinus adheres in the first instance to Plato. The sensuous world in contrast to the supersensuous is the region of the divisible and changeable—of being which is subject to natural necessity, to relations of space and time, and is without true reality. The source of this world can only lie in matter; which we must presuppose as the general substratum of all becoming and change. As Plato and Aristotle had already stated, it is something without form and definition, the shadow and mere possibility of being, the not-being, deprivation, *penia*. But it is also—and in this point

Plotinus goes beyond Plato—the evil, and even the original evil; from it arises all that is evil in the corporeal world, and from the body arises all the evil in the soul. Yet it is necessary. Light must, in the end, at the furthest distance from its origin, become darkness; the spirit must become matter; the soul must create the corporeal as its locality. But as the soul illuminates and forms that which is beneath it, it enters into relation with it. By transferring the supersensuous into matter, which can only receive it successively, it creates time as the general form of its own life and the life of the world. This activity of the soul (or nature, cf. p. 333) is nevertheless not a will, but an unconscious creation, a necessary consequence of its nature, and for this reason the world is without beginning and end, as Plotinus teaches with Aristotle. At the same time, following the Stoics, he assumes a periodical recurrence of the same conditions of the world. But necessary as the activity is, it is always a sinking of the soul in matter, and it is therefore regarded as a fall of the soul.

So far as the world is material, it is regarded by Plotinus as a shadowy copy of the truly real or supersensuous. Yet as it is the soul which creates it and expresses upon it the traits of its origin, everything in it is arranged by numbers and ideas, by the creative concepts (the λόγοι σπερματικοί, cf. p. 240), which are the nature of things. Hence it is as beautiful and perfect as a material world can be. The contempt which the Christian Gnostics showed for nature is repudiated by Plotinus with the true Hellenic feeling for nature; and if he does not acknowledge, for the world at any

rate, a providence of the gods, resting on purpose and will, and directed to details, and the notion of providence is expressed in him as the natural operation of the higher on the lower, yet the belief in providence as such is maintained by him in connection with the Platonic and Stoic theodicy. And it is maintained with the greater success as his views on the freedom of the will and future retribution put him in a position to justify on other grounds precisely those evils which caused the Stoics so much trouble. Plotinus is also connected with the Stoics in his doctrine of the 'sympathy of all things' (p. 242). But while they intended this to mean the natural connection of cause and effect, Plotinus means by it an operation at a distance, which rests on the fact that, owing to the universal vitality and animation of the world, everything that affects a part of it is felt by the whole, and consequently by all the other parts.

In the universe the heaven is that into which the soul first pours itself. In it therefore dwells the purest and noblest soul. Next to the heaven are the stars, which are also extolled by Plotinus as visible gods. Exalted above change and temporal life, and consequently incapable of remembrance, or of capricious action, or of a presentation of what is below them, they determine the latter with that natural necessity which has its source in the connection and sympathy of the universe. Astrology, on the other hand, with the notion on which it rests—that the stars exert a capricious influence on the course of the world—is distinctly controverted by Plotinus, and astrological prediction is limited to the knowledge of future events from the

natural prognostics. The space between the stars and the earth is the dwelling-place of the demons. Plotinus shares the ideas of his school about these beings, though he interprets them in a psychological manner in his teaching of Eros.

Of earthly beings man only has an independent interest for our philosopher. Yet his anthropology is, in essentials, merely a repetition of the Platonic. He describes, at greater detail and in a more dogmatic tone than Plato, the life which the soul leads in the supersensuous world, in which it, like the souls of the gods, was subject neither to change nor time, without remembrance, self-consciousness, and reflection, and had a direct intuition in itself of the *νοῦς*, the existent and primal essence. He regards its descent into a body (and even in heaven it clothes itself with an ethereal body) as a necessity of nature, and yet as the guilt of the soul, inasmuch as it is attracted by an irresistible internal impulse into the body which corresponds to its nature. He finds the peculiar essence of man in his higher nature, to which, however, by its combination with the body, a second *Ego* and a lower soul were added, and this second soul, though depending on the other, reaches down into the body. Like Aristotle, he regards the relation of the soul to the body as the same with the relation of operative force to its instrument. He attempts to conceive the passionate conditions of the soul, and the activities of it which are related to what is sensual, as processes which take place partly in the body and partly in it and the lower soul, and are merely perceived by the higher. He defends

the freedom of the will against the Stoic and all other kinds of fatalism in the most vigorous manner; but his defence does not go very deep, and he repeats the assertion that evil is involuntary. Freedom is combined with providence by the remark that virtue is free, but her acts are entangled in the connection of the world. Further, Plotinus repeats the Platonic proofs for the immortality of the soul, which, however, are again rendered questionable by the fact that the souls cannot remember their earthly existence in the supersensuous world. He includes entrance into the bodies of plants in his migration of souls; the retribution, to which it conducts, is formed into a *jus talionis* extending to the most minute details.

§ 98. *Plotinus' Doctrine of Exaltation into the Supersensuous World.*

As the soul in her nature belongs to a higher world, her highest mission can only be to live exclusively in that world and liberate herself from all inclination to the sensual. Happiness, according to Plotinus, consists in the perfect life, and this consists in thought. Of external circumstances happiness is, in his view, so independent, that no Stoic could express himself more decisively. The first condition of it is liberation from the body and from all that is connected with it, or purification (*κάθαρσις*); the immediate result of which is that the soul, unrestrained by any alien element, addresses herself to her special task. Katharsis includes all virtues. That this liberation from sensuality should be brought about by an ascetic

life is not universally demanded by Plotinus in spite of the abstinences which he laid upon himself and recommended to others. In his discussions on Eros he agrees with Plato that even sensuous beauty may lead us to the supersensuous. But the view that the combination with the body is the source of all the evil in the soul, and that every activity has a higher value as it brings us into less contact with the world of senses, governs his entire ethics. Practical and political action is indeed indispensable, and the virtuous man will not withdraw himself from it, but it entangles us too deeply in the external world, and makes us dependent on something not ourselves. The ethical and political virtues are only an imperfect compensation for the theoretic. Even these last are of very unequal value. Sensuous perception gives us but dim traces of truth. Mediated thought (*διάνοια*, *λογισμός*) and its artistic practice, or dialectic, stand far higher. They have to do with the truly real, with ideas and the essence of things. But this indirect knowledge presupposes a direct, the self-intuition of the thinking spirit, which is at the same time an intuition of the divine *νοῦς*. Even this does not satisfy our philosopher. It leads us to the *νοῦς*, but not beyond it, and it allows the distinction of the mind and the intuition to remain. We do not reach the highest point till we are completely buried in ourselves and elevated even above thought, in a state of unconsciousness, ecstasy (*ἔκστασις*), and singleness (*ἁπλωσις*), suddenly filled with the divine light. Thus we become so immediately one with the primal being that all dis-

tinction between it and us disappears. From his own experience Plotinus was no doubt acquainted with this condition, which however, can only be transitory. Among his Greek predecessors none had required this transcendence of thought, just as none had placed the Deity above thought. In this Philo alone was his pattern.

In comparison with this spiritual exaltation to the Deity positive religion has, on the whole, only a subordinate importance for Plotinus. It is true that he is far removed from taking up a critical attitude in opposition to it. Besides the Deity in the absolute sense, his system recognises a number of higher beings which can be regarded partly as visible and partly as invisible gods. He pronounces a distinct reproof when anyone (like the Christians) refused to them their appropriate honours. He interprets the gods of mythology and their history, so as to apply to these deities, with the usual caprice, though he does not occupy himself so eagerly with this subject as many of the Stoics had done. Further, he makes use of his doctrine of the sympathy of all things for a supposed rational foundation of the worship of images, prophecy, prayer, and magic, under which he includes every inclination and disinclination, and every operation of the external on the internal. On the other hand, he does not find it possible to combine a perception of that which happens on the earth, or a personal influence on the course of the world, with the nature of the gods. But though he laid the foundation on which his successors continued to build in their defence and systematisation of the national religion, his own attitude

to it is comparatively free. For his own requirements his ideal sense is satisfied with the inward worship of the philosopher. 'The gods,' he said, *ap.* Porphyr. 'V. Plot.' 10, when Amelius wished to take him into a temple, 'must come to me; it is not I who must go to them.'

§ 99. *The School of Plotinus. Porphyry.*

Among the pupils of Plotinus, Gentilianus Amelius, who has just been mentioned, is shown in the little that we know of him to have been a thinker without clearness, an intellectual kinsman and admirer of Numenius. Far clearer is the learned Porphyry (properly Malchus) of Tyre. He was born 232–3 A.D., and first attended Longinus, then Plotinus, and died after 301, apparently in Rome. Besides some Platonic writings, he commented on a good many of Aristotle's works, and devoted his attention especially to the Aristotelian logic (his introduction to the categories, and the lesser of his commentaries on this tract are still existing). This study of Aristotle and the influence of Longinus must have helped him in the effort after clearness in ideas and expression. He makes it his task to set forth and explain, not to examine or systematically develop, the doctrine of Plotinus. In his sketch of it (*ἀφορμαὶ πρὸς τὰ νοητά*) he lays the greatest weight on the sharp distinction of the intellectual and corporeal, without in the rest deviating from the determinations of Plotinus. In the *νοῦς* he distinguishes being, thought, and life; but he would doubtless have hesitated to speak of three *νοῖ*, as Amelius had done in

regard to a similar distinction. In his anthropology, to which he devoted several writings, there is a marked effort, so far as we can see, to combine the unity of the soul with the multiplicity of its activities and powers. The soul, he says, has the forms (λόγος) of all things in itself; according as thought is directed to this or that object it assumes a corresponding form. Hence he allows the assumption of different parts in the soul, only in an improper sense. In like manner, the universal soul makes up the essence of the individual souls, without dividing itself among them. Porphyry ascribes reason to the animals, but will not extend the migration of souls to the bodies of animals; and, on the other hand, human souls are not allowed to exalt themselves to a superhuman nature. Yet even he allows the purified soul to look forward to an entire liberation from the irrational powers, but in this liberated condition the remembrance of the earthly state is extinguished along with the desires. But for Porphyry the chief object of philosophy lies in its practical influence, in the 'salvation of the soul.' The most important feature in this is the purification, the liberation of the soul from the body, on which greater stress is laid in his ethics than in Plotinus. Purifying virtue is, indeed, placed above the practical, but beneath the theoretic or paradeigmatic (which belongs to the *νοῦς* as such). For this purification he demands, more decidedly than Plotinus, certain ascetic practices, such as abstinence from flesh, on which he composed a treatise (*περὶ ἀποχῆς ἐμψύχων*), celibacy, absence from shows and similar amusements. He requires the

support of positive religion in a greater degree than Plotinus to aid us in the struggle against sensuality. It is true that there was much in the faith and worship of his time which he could not accept. He acknowledges that a pious life and holy thoughts are the best worship, and alone worthy of the supersensuous gods. In the remarkable letter to Anebo he raises such considerable doubts about the prevailing ideas of the gods, about demons, prophecy, sacrifices, and astrology, that we might believe that he felt it necessary to repudiate them all. Yet this is not his meaning. As he says, we must elevate ourselves by the natural gradations—the demons, the visible gods, the soul, and the *νοῦς*—to the First. From this point of view his demonology, which is filled with all the superstitions of his time and his school, provides him with means for undertaking the defence of the religion of his people—which he supports in his fifteen books against the Christians—even against his own doubts. On the one hand, he believes that their religion has been falsified by wicked demons, so that a purification of it from anything that is objectionable is only a restoration of it to its original nature. On the other hand, he can justify the myths as allegorical explanations of philosophical truth, the images of gods and sacred animals as symbols, and prophecy as an interpretation of natural prognostics, in which, no doubt, demons and the souls of animals are intermediary agents. Magic and theurgy are justified as a means of operating on the lower powers of the soul and nature, and the demons. Even those things which he disapproves of in themselves, like

blood-offerings, he allows in public worship as a means to lay impure spirits. But the private religion of the philosopher must remain free from them.

§ 100. *Iamblichus and his School.*

What in Porphyry was chiefly a concession to the traditional form of faith, becomes in his pupil Iamblichus (of Chalcis; died about 330 A.D.), the central point of his scientific activity. For this very reason he was deified by his pupils and the later Neo-Platonists (*θεῖος* is his usual epithet). Iamblichus did not only belong to Syria by origin, but he appears to have passed his life there, and in his philosophy the influences of the East are deeply felt. He was a learned scholar, an exponent of Platonic and Aristotelian works, and a copious writer—besides many fragments we have five books of his *συναγωγὴ τῶν Πυθαγορείων δογμάτων*. But he is far more of a speculative theologian than a philosopher; and uncritical as he is, he prefers to draw his philosophy from the most muddy and recent sources. Against the defects of earthly existence, the oppression of natural necessity, he can only find aid among the gods; to his fantastic thought every moment in a conception is transferred into an independent substance. His need of belief can never be satisfied with a multiplication of the divine. On the principle that there must be a mediate element between every unity and that to which it communicates itself, he distinguished a second unity from the one inexpressible original essence, which stood midway between it and plurality. He divided the *νοῦς* of

Plotinus into an intelligible (*νοητός*) and an intellectual world; and the first, in spite of its unity, which was to exclude all multiplicity, into a triad. This triad extended into three triads. In like manner, the intellectual was divided into three triads, of which the last apparently became a hebdomad. The original forms belong to the intelligible; the ideas to the intellectual. From the first soul Iamblichus derived two others, from which, however, he divided the *νοῦς* which belonged to them, and this also was done in a double form. Next to these superterrestrial gods stand the terrestrial in three classes; twelve heavenly gods, which are again multiplied to thirty-six, and these to 360; seventy-two orders of subcelestial, and forty-two of natural gods (the numbers appear to be taken to some extent from astrological systems). These are followed by angels, demons, and heroes. The national deities can be interpreted into these metaphysical beings with the usual syncretistic caprice. In a similar manner, the worship of images, theurgy, and prophecy are defended on grounds in which, in the most contradictory manner, the most irrational superstition is combined with the desire to represent the miraculous as something rational. This theological speculation is united in Iamblichus with speculation in numbers, to which, after the pattern of the Neo-Pythagoreans, he ascribes a higher value than to scientific mathematics, much as he prizes the latter. In his cosmology, besides the eternity of the world, which he shares with his whole school, the most noticeable point is his account of nature or destiny (*εἱμαρ-*

μένη), so far as he describes this as a power oppressing mankind, from the bonds of which he can only be liberated by the interference of the gods. In his psychology the effort is more strongly marked even than in Porphyry to keep for the soul her middle position between infrahuman and superhuman beings. With Porphyry also he contests the transition of human souls into the bodies of animals, and the more so because he did not, like Porphyry ascribe reason to the animals. To Porphyry's four classes of virtues (p. 341) he added, as a fifth and highest class, the 'single' (ἑνιαῖαι) or 'priestly' virtues, which elevate a man to the primal essence as such. Yet with him also the most necessary part is the purification of the soul, by which alone it withdraws from connection with the sensuous world and dependence on nature and destiny.

The mode of thought of which Iamblichus is the most distinct representative dominates the Neo-Platonic school from his time. In the treatise 'On the Mysteries,' which is ascribed to him, and which is apparently the work of one of his immediate pupils, sacrifices, prophecy, theurgy, &c., are defended, against Porphyry (p. 342), quite in his spirit, with the aid of the proposition that we can only attain to the higher by the aid of the lower, and that man, at any rate, owing to his sensual nature, cannot dispense with these material intermediaries. The defence is carried out with success and skill. But at the same time stress is laid on the fact that only divine revelation can instruct us in the means by which we can enter into union with the Deity. The priests, therefore, who are the deposi-

taries of this revelation, stand far higher than the philosophers. Among the pupils of Iamblichus who are known to us, Theodorus of Asine, who also attended Porphyry, appears to have been the most important. In the accounts of him, which we owe almost exclusively to Proclus—he seems to have preceded the latter in the attempt to carry out a triple arrangement through the parts of the supersensuous world. The primal being, from which he does not, like Iamblichus, distinguish a second unity, is followed by three triads, into which he divided the *νοῦς*: an intelligible, an intellectual (being, thought, life, p. 340), and a demiurgic, which in turn included three triads. Then come three souls, of which the lowest is the world-soul, or destiny, and its body is nature. What is known to us of his more precise determinations on these beings is very formal, and degenerates into mere childishness. Of two other pupils of Iamblichus, Ædesius and Sopater, we only know that the first followed him in the management of the school, and the second obtained influence at court under Constantine I., but was afterwards executed. Dexippus is known to us by his explanation of the categories, in which he depends entirely upon Porphyry and Iamblichus. Among the pupils of Ædesius, Eusebius took a scientific direction, but the greatest influence was exercised by Maximus, whose death was finally caused by his arrogance and his theurgic arts (about 370 A.D.). He and his associate Chrysanthius, who was personally more attractive and estimable, gained over the Emperor Julian for philosophy and the older deities. Other members of this

circle are Priscus, Sallustius, Eunapius (p. 13), and the famous orator Libanius. When Julian, after his accession (361 A.D.), undertook to restore the Hellenic religion, he was led to this step by the Neo-Platonist philosophy. But the attempt must have failed even if the early death of its author (363) had not brought it to a sudden end. Julian's writings, so far as they are of a philosophical nature, do not exhibit, any more than his friend Sallustius' book on the gods, an independent advance in the propositions borrowed from Iamblichus. The intellectual Hypatia, who was at the head of the Platonic school at Alexandria, and brought it to a high state of prosperity, finally fell a victim (415) to the fanaticism of the Christian rabble. If we may draw this conclusion from the treatises of her pupil Synesius, Bishop of Ptolemais (365–415), she appears to have taught the Neo-Platonic doctrine in the form in which Iamblichus had stated it.

§ 101. *The School of Athens.*

The final application of the Neo-Platonic science was caused by the study of Aristotle. This had never become extinct in the school during the fourth century, though after the time of Iamblichus it undeniably lost ground in influence and importance before theosophical speculations and theurgy. Now, however, it was resumed with greater and more lasting eagerness, since the school, after the failure of Julian's attempt at restoration, found itself in the position of a suppressed and persecuted sect, with hopes almost entirely restricted to its scientific activity. In Constantinople,

during the second half of the fourth century, Themistius devoted himself to the explanation of the Aristotelian and Platonic writings. If he cannot be counted among the Neo-Platonists owing to his somewhat superficial eclecticism, yet he coincides with them in his conviction of the entire agreement of Aristotle and Plato. But the chief seat of Aristotelian studies was the Platonic school at Athens. This school also carried out that combination of Aristotelism with the theosophy of Iamblichus, which imprinted a peculiar stamp on the Neo-Platonism of the fifth and sixth centuries, and the Christian and the Mohammedan philosophy which sprang from it. About the beginning of the fifth century we meet with the Athenian Plutarchus, the son of Nestorius, who died in 431–2 at a great age, as the leader of the school and an eminent teacher. Plutarchus explained the writings of Plato and Aristotle with equal zeal both in writings and in lectures. The little that we know of his philosophical views does not go beyond the tradition of his school. It deals chiefly with psychology, which he treats carefully on the foundation of Aristotle and Plato. At the same time, we are told that he had acquired from his father and propagated all kinds of magical and theurgic arts. Of his pupils, Hierocles is known to us by some writings and excerpts. He taught philosophy in his native city of Alexandria at the same time as Olympiodorus, the Aristotelian. In his writings we see a philosopher who in general stands on the footing of Neo-Platonism, but ascribes a far greater value to such doctrines as are practically fruitful than to metaphysical speculation.

His pupil Theosebius followed in a similar direction. The more eagerly was this speculation carried on by Syrianus, the collaborator and successor of Plutarch, who was a fellow-citizen and pupil of Hierocles. This Platonist, who is so highly praised by Proclus and later writers, was at the same time an accurate scholar and eager exponent of Aristotle. But his guiding authorities, besides Plato, whom he places far below Aristotle, are the Neo-Pythagorean and Orphic writings, and the supposed Chaldæan divine utterances. The favourite object of his speculation is theology. But in scientific completeness his treatment of the subject [1] is far behind that of Proclus. From the One, which is without opposites, he primarily derives with the Neo-Pythagoreans the unit and the indefinite duality as the most universal causes of things. In the *νοῦς* he distinguished with Iamblichus the intelligible and the intellectual, at the head of which stands the demiurge. The ideas were thought to have originally existed as the primary forms or unified numbers in the intelligible, and afterwards in a derivative manner in the intelligence of the demiurge. With regard to the soul, he remarked (according to Proclus, 'In Tim.' 207 B.) that it partly remained in itself, and partly came forth from itself, and partly returned to itself, without, however, applying this distinction, if it really belongs to him, to the totality of actual things. Of other views, we may mention that he maintained in regard to 'immaterial' bodies that

[1] So far as we know it from the single specimen which is left, a part of his commentary on the metaphysics, Schol. in Arist. 837 ff., and from Proclus, *In Timæum.*

they could occupy the same space with others, and that the souls continued after death in their ethereal bodies, for ever united with the higher of the irrational powers of life, and with the lower for a time. For the rest, he does not appear to have differed from the traditions of his school.

Of the pupils of Plutarchus and Syrianus, Proclus, the Lycian, was the successor of the last. He was born in Constantinople in 410 A.D., came to Athens in his twentieth year, and there died in 485 A.D. Besides him his fellow-pupil Hermias, who taught at Alexandria, is of little importance. By his iron industry, his learning, his mastery in logic, his systematic spirit, and his fruitful work as a teacher and a writer,[1] Proclus is as distinguished among the Platonists as Chrysippus among the Stoics. But he was at the same time an ascetic and a believer in theurgy, who thought that he received revelations, and could never have enough of religious exercises. He shared in the religious enthusiasm of his school, in their faith and their superstition, in their regard for Orphic poems, Chaldæan oracles, and the like. He now undertook to work up into a single methodical system the whole mass of theological and philosophical tenets handed down by his predecessors. This system, in its formal completeness, in the inward want of freedom of thought from which it arose, and in the absence of any really scientific foundation and treatment, may be compared

[1] On the writings of Proclus, of which only a part has been preserved, cf. *Phil. d. Gr.* iii. b. 778 f. Freudenthal in *Hermes*, xvi. 214 f.

as a Hellenic pattern with the systems of the Christian and Mohammedan scholastics. The prevailing law, upon which this system is constructed, is that of triadic development. The thing produced is, on the one hand, similar to that which produces it, for one can only produce the other by communicating itself to it. On the other hand, it differs from it as what is divided from unity, as the derivative from the original. In the first respect, it remains in its cause, and the cause, though only incompletely, in it; in the second, it proceeds out of the cause. But inasmuch as it clings to it, and is related to it, it turns to it in spite of the separation, seeks to imitate it on a lower stage, and unite with it. The existence of what is produced in that which produces it, its emergence from it, and its return to it (*μονή*, *πρόοδος*, *ἐπιστροφή*) are the three moments, by the continued repetition of which the totality of things is developed from their origin. The final source of this development can naturally be nothing but the original essence, which Proclus describes after Plotinus as absolutely elevated above all being and knowledge, as higher than the unit, as a cause without being the cause, as neither being nor not-being, &c. But between this first and the intelligible he inserts with Iamblichus (p. 344) an intermediary member: the absolute unities (*αὐτοτελεῖς ἑνάδες*) which form the single, supernal number, but which are at the same time denoted as the highest gods, and in that capacity receive predicates which are far too personal for their abstract nature. After them comes the province which Plotinus allotted to the *νοῦς*.

Proclus, partly following Iamblichus and Theodorus (p. 344), divides this into three spheres: the intelligible, the intellectual-intelligible (*νοητὸν ἅμα καὶ νοερόν*), and the intellectual. The chief property of the first is being; of the second, life; of the third, thought. Of these spheres the two first are again divided into three triads each, somewhat on the same principles of division. The triad is divided into seven hebdomads, and the separate members of each series are regarded at the same time as gods and identified with one of the deities of the national religion. The soul, of which the conception is defined as in Plotinus, comprises three classes of part-souls: divine, demonic, and human. The divine are divided into three orders: the four triads of hegemonic gods, an equal number of gods free from the world (*ἀπόλυτοι*) and the gods within the world, which are divided into star-gods and elementary gods. In interpreting the national gods in reference to this system, Proclus finds it necessary to assume a triple Zeus, a double Kore, and a triple Athene. The demons are connected with the gods. They are divided more precisely into angels, demons, and heroes, and described in the ordinary way with a large admixture of superstition. Next to them come the souls which enter temporarily into material bodies. Plotinus had allowed matter to be created by the soul; Proclus derives it immediately from the unlimited, which with him, in combination with the limited and the mixed, forms the first of the intelligible triads. As to its nature, it is not with him the evil, but neither good nor evil. His cosmological

ideas agree in all that is essential with those of Plotinus, except that he regards space as a body consisting of the finest light, which body penetrates that of the world (cf. Syrian. p. 349). Like Plotinus, he undertakes the defence of Providence, on account of the evil in the world. He joins him and Syrianus in his assumptions about the descent and the future fortunes of the soul. In his psychology he combines Platonic and Aristotelian determinations, but increases the number of the soul's capacities by dividing the principle of unity or divinity in men from thought or reason. This element is higher than the others, and by it only can the divine be known. His ethics require an elevation to the supersensuous, ascending by degrees through the five classes of virtues (which we found in Iamblichus, p. 345). With him also the final object of this elevation is the mystic union with the Deity. But the more firmly he is convinced that all higher knowledge rests on divine illumination, and that it is faith alone which unites us with the Deity, the less is he inclined to abandon all those religious helps to which the Neo-Platonic school since Iamblichus had ascribed so high a value, and the efficiency of which Proclus also defends on traditional grounds. His explanations of myths are naturally conceived in the same spirit.

In the hands of Proclus the Neo-Platonic doctrine received the final form in which it was handed down to posterity. The school had some eminent representatives after his time, but none who can be compared with him in scientific power and influence. His pupil Ammonius, the son of Hermias (p. 350), who taught in

Alexandria for a considerable time, as it seems, and enjoyed a great reputation, was an excellent exponent of the Platonic, and even more so of the Aristotelian, writings, and a great proficient in the mathematical sciences. But we do not find in him any independent views of importance. Asclepiodotus, whom Simplicius ('Phys.' 795, 13) calls the best pupil of Proclus, an eminent mathematician and physicist, appears to have been distinguished from the majority of his party by a jejune mode of thought, inclined to theological extravagances and theurgic practices. Marinus, the biographer of Proclus and his successor in the management of the school, was of little importance; his successor, the Isidorus whom Damascius admired ('Vita Isid.' *ap.* Phot. 'Cod.' 181. 242), was a confused theosophist in the style of Iamblichus. Of Hegias, another pupil of Proclus who followed Isidorus, we know no more than of other pupils whose names are handed down to us. Damascius, the pupil of Marinus, Ammonius, and Isidorus, who was head of the school at Athens about 520–530 A.D., an admirer and intellectual kinsman of Iamblichus, endeavours in vain in his work on the ultimate sources (*περὶ ἀρχῶν*[1]) to find the means of transition from the primal essence—of the inconceivability of which he cannot speak strongly enough—to the intelligible by the insertion of a second and third unity. In the end he finds himself forced to the confession that we cannot properly speak of an origin of the lower from the higher, but only of one uniform,

[1] First, partially, edited in writings, see *Phil. d. Gr.* iii. b. 1826, by Kopp. On his other 838. 7.

undistinguished being. Simplicius belongs to the last heathen generation of Neo-Platonists. He was a pupil of Ammonius and Damascius, and his commentaries on several of Aristotle's works are invaluable to us. They are evidence, not only of the learning, but of the clearness of thought of their author, but they never go beyond the limits of the Neo-Platonic tradition. To the same generation belong Asclepius and the younger Olympiodorus, two pupils of Ammonius, of whom we have commentaries, and others also. But in the Christianised Roman Empire, philosophy could not long maintain itself independently of the victorious Church. In the year 529 A.D. Justinian forbade philosophy to be taught in Athens. The property of the Platonic school was confiscated. Damascius, with six associates, among whom was Simplicius, emigrated to Persia, from whence he soon returned undeceived. Shortly after the middle of the sixth century the last of the Platonists who did not enter the Christian Church seem to have died out. Olympiodorus composed his commentary on the 'Meteorology' after 564 A.D.

In the western half of the Roman Empire, Neo-Platonism appears to have been propagated only in the simpler and purer form which it received from Plotinus and Porphyry. Traces of its existence are perhaps to be found in the logical works and translations of Marius Victorinus (about 350), of Vegetius (Vectius, Vettius) Prætextatus (died, apparently, 387), Albinus, so far as we know anything of him, and in the encyclopædic work of Marcianus Capella (350–400). More distinctly do they appear in Augustine (353–430), and

the two Platonists Macrobius (about 400) and Chalcidius (in the fifth century). The last representative of ancient philosophy here is the noble Anicius Manlius Severinus Boëthius, who was born about 480, and executed at the command of Theodoric in 525. Although he belonged outwardly to the Christian Church, his real religion was philosophy. In this he is a follower of Plato and Aristotle, who, in his view, completely agree. His Platonism has a Neo-Platonic hue. But in his philosophic 'Consolation' the influence of the Stoic morality cannot fail to be recognised.

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